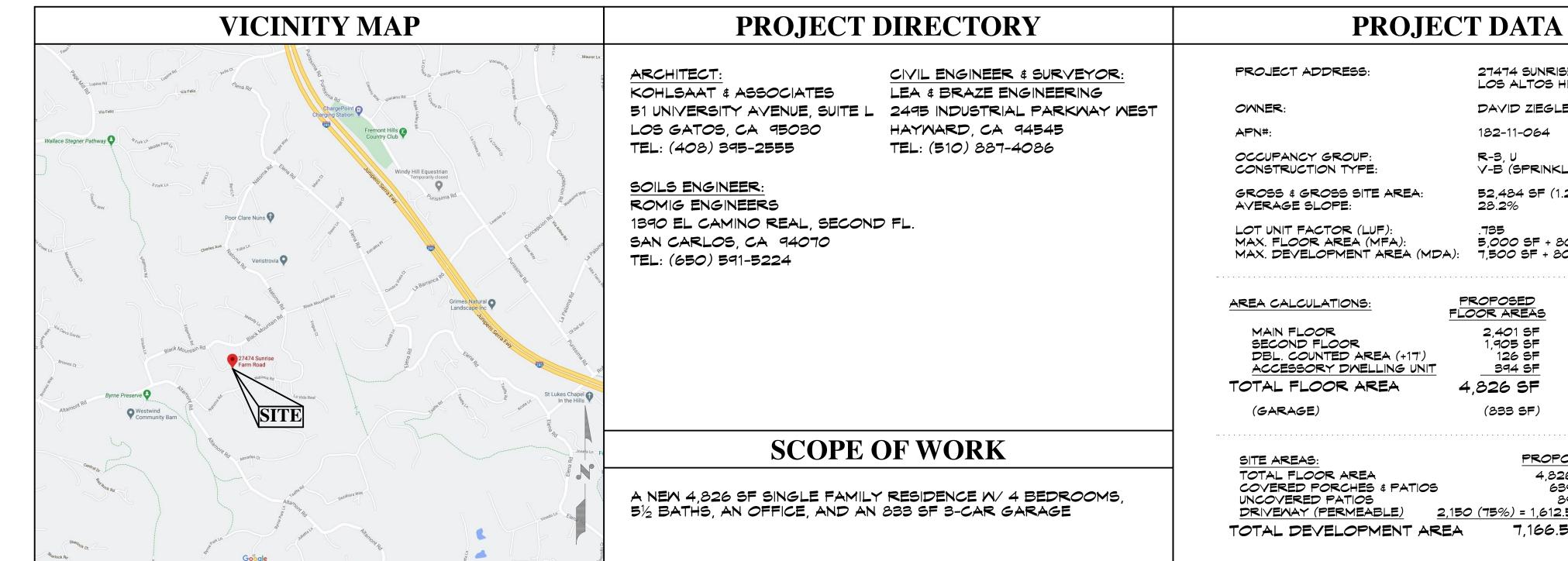
sнеет **А-1**

1 OF -

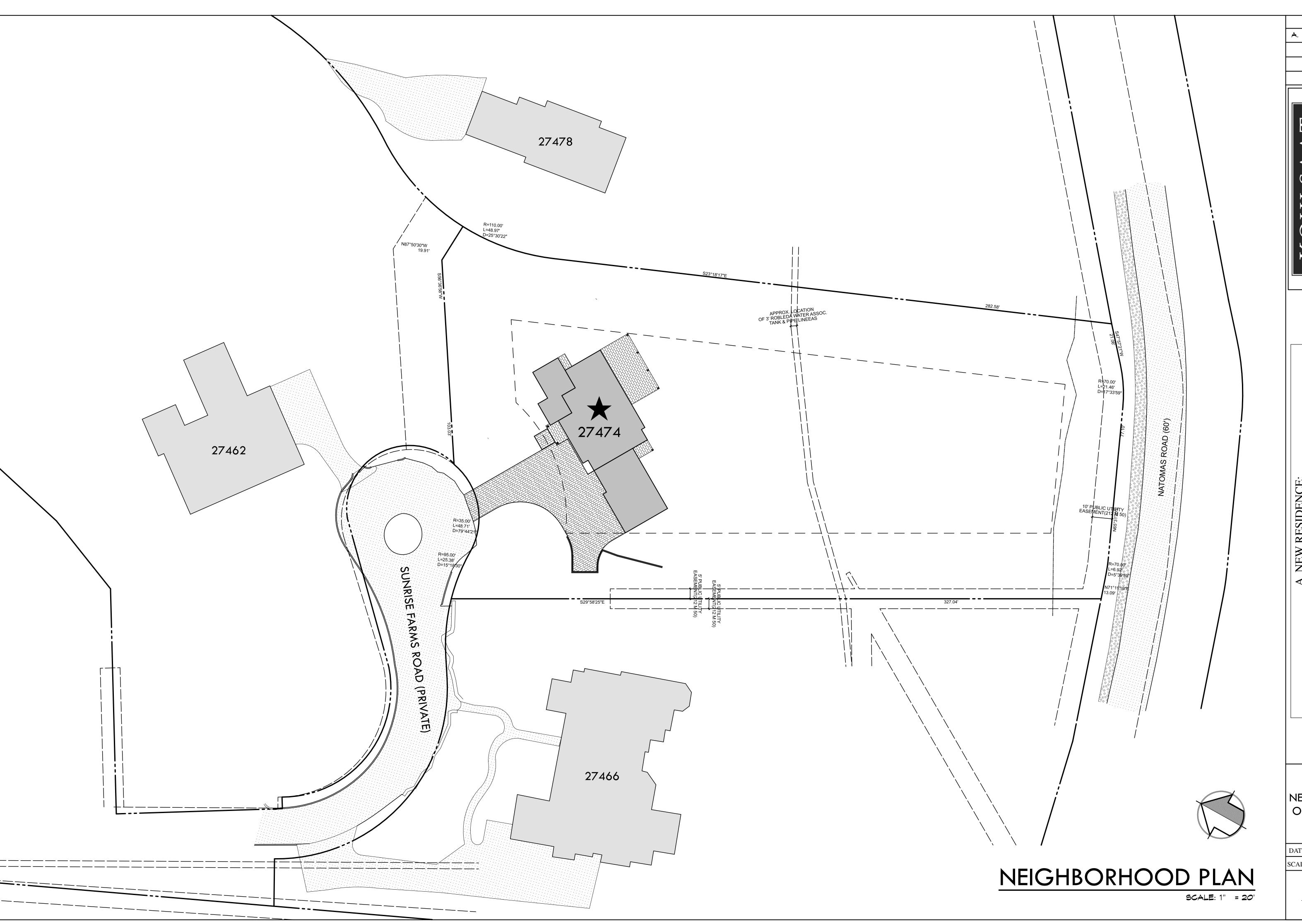


The Ziegler Residence



PROJECT ADDRESS:	27474 SUNRISE FARMS ROAD	A-1 COVER SHE	-
	LOS ALTOS HILLS, CA 94022	A-2 NEIGHBORH	OOD PLAN
OMNER:	DAVID ZIEGLER	A-3 SITE PLAN	
		C-1.0 CIVIL COVE	
APN#:	18 2 -11- <i>064</i>	C-1.1 OVERALL S	ITE PLAN
			DRAINAGE PLAN
OCCUPANCY GROUP: CONSTRUCTION TYPE:	R-3, U V-B (SPRINKLERED)		DRAINAGE PLAN
CONSTRUCTION TIPE:	V-D (SFRINKLIND)	C-3.0 UTILITY PLAN	N
GROSS & GROSS SITE AREA:	52,484 SF (1.205 AC)	C-3.1 UTILITY PLAN	N
AVERAGE SLOPE:	28.2%	C-4.0 DRIVENAY F	PROFILE
		C-4.1 SITE SECTIO	N A-A
LOT UNIT FACTOR (LUF): MAX. FLOOR AREA (MFA):	.735 5,000 SF + 800SF = 5,800 SF	C-4.2 SITE SECTIO	N B-B
	s): 7,500 SF + 800SF = 8,300 SF	C-5.0 DETAILS	
	y. 1,500 bi 1 5000i - 5,500 bi	C-5.1 DETAILS	
		C-6.0 GRADING S	PECIFICATIONS
	PROPOSED EXISTING/	ER-1 EROSION CO	ONTROL PLAN
AREA CALCULATIONS:	FLOOR AREAS DEMO AREAS	ER-2 EROSION CO	ONTROL DETAILS
	<u> </u>	SU1 TOPOGRAPI	HIC SURVEY
MAIN FLOOR SECOND FLOOR	2,401 SF 0 SF 1,905 SF 0 SF	SU2 TOPOGRAP	HIC SURVEY
DBL. COUNTED AREA (+17')	126 SF 0 SF	A-4 MAIN FLOOF	R PLAN
ACCESSORY DWELLING UNIT	394 SF 0 SF	A-5 SECOND FLO	OOR PLAN
TOTAL FLOOR AREA	4,826 SF 0 SF	A-6 ROOF PLAN	1
	4,525 51	A-7 FRONT & LE	FT ELEVATIONS
(GARAGE)	(833 SF) (O SF)	A-8 REAR & RIGI	HT ELEVATIONS
		A-9 CROSS SEC	TIONS
		C-1.0 SANITARY S	EMER LATERAL PLAN TITLE SHEET
SITE AREAS:	PROPOSED EXISTING	C-1.1 SANITARY S	EMER CONSTRUCTION STANDARDS
TOTAL FLOOR AREA	4.826 SF O SF	C-1.2 SANIITARY S	BEWER CONSTRCTION STANDARDS
COVERED PORCHES & PATIOS	639 SF 0 SF	C-2.0 SANITARY S	EMER LATERAL PLAN
UNCOVERED PATIOS	89 SF 0 SF	C-3.0 DETAILS	
DRIVEWAY (PERMEABLE) 2,	<u>150 (75%) = 1,612.5 SF</u> <u>299 SF</u>		ONTROL NOTES
TOTAL DEVELOPMENT ARE	A 7.166.5 SF 299 SF		Y TRAFFIC CONTROL PLAN

SHEET INDEX



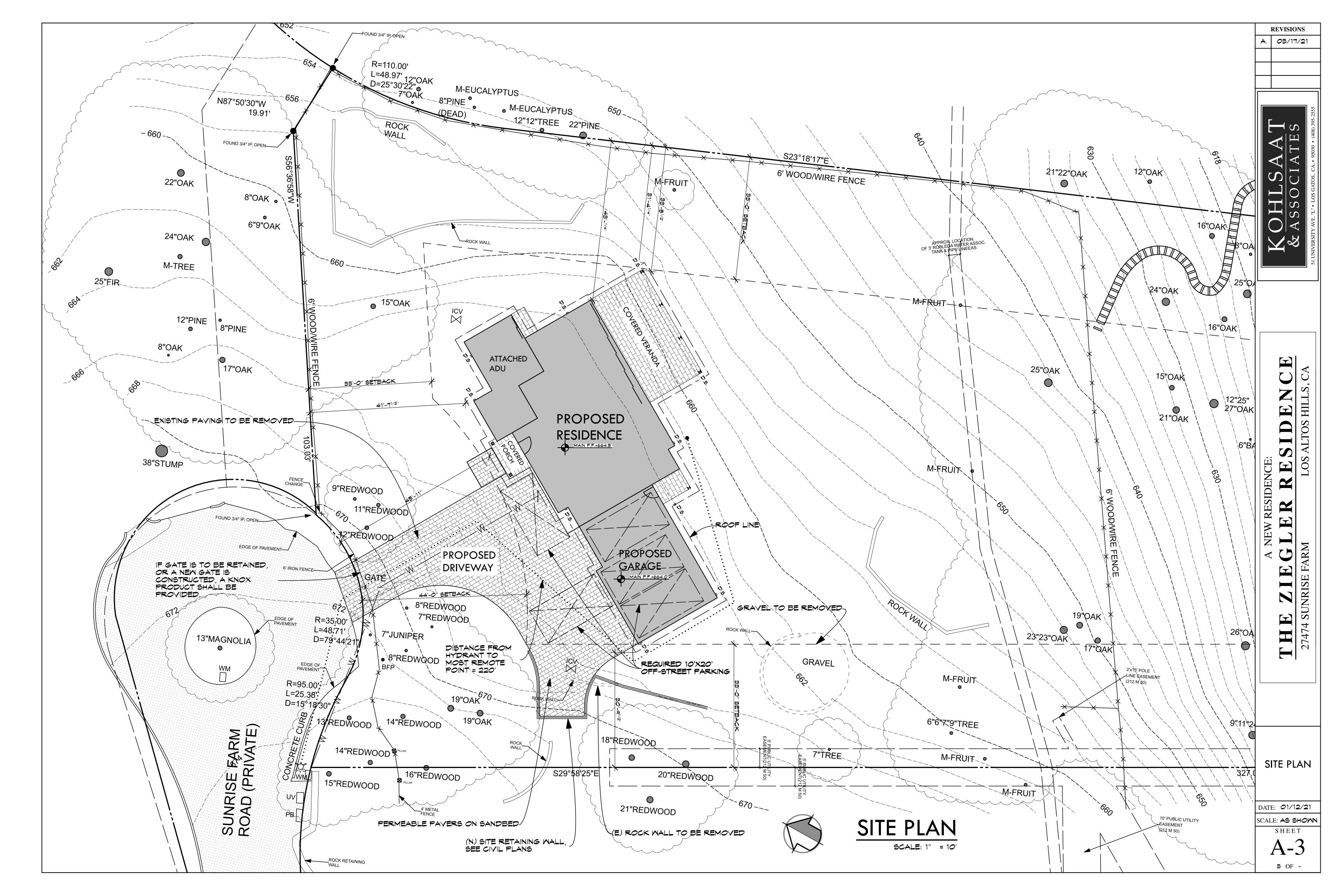
REVISIONS

A. 03/17/21

NEIGHBORH OOD PLAN

DATE: 01/12/21 SCALE: AS SHOWN

SHEET

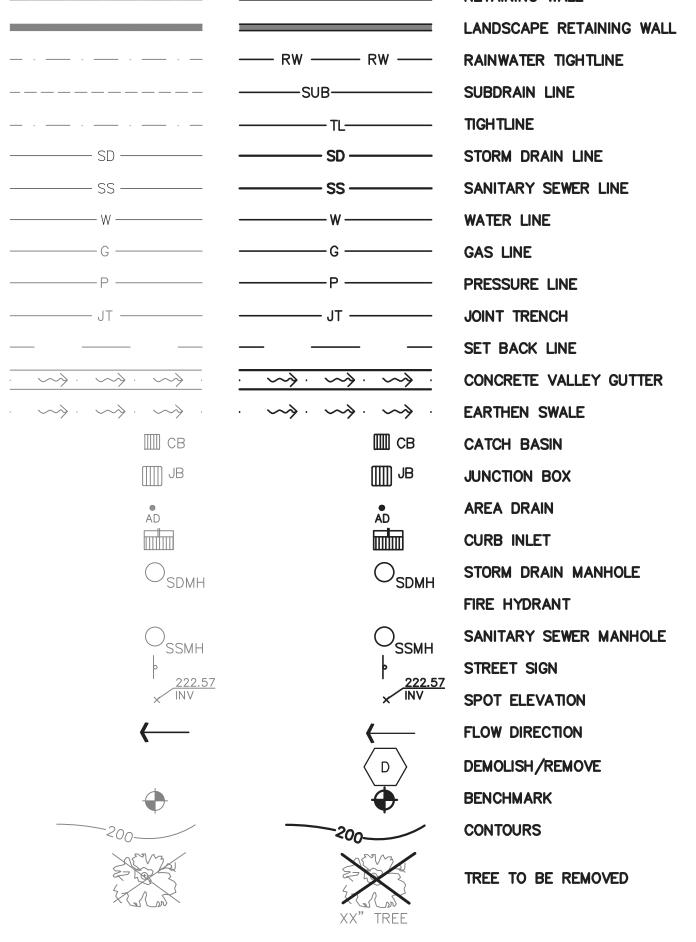


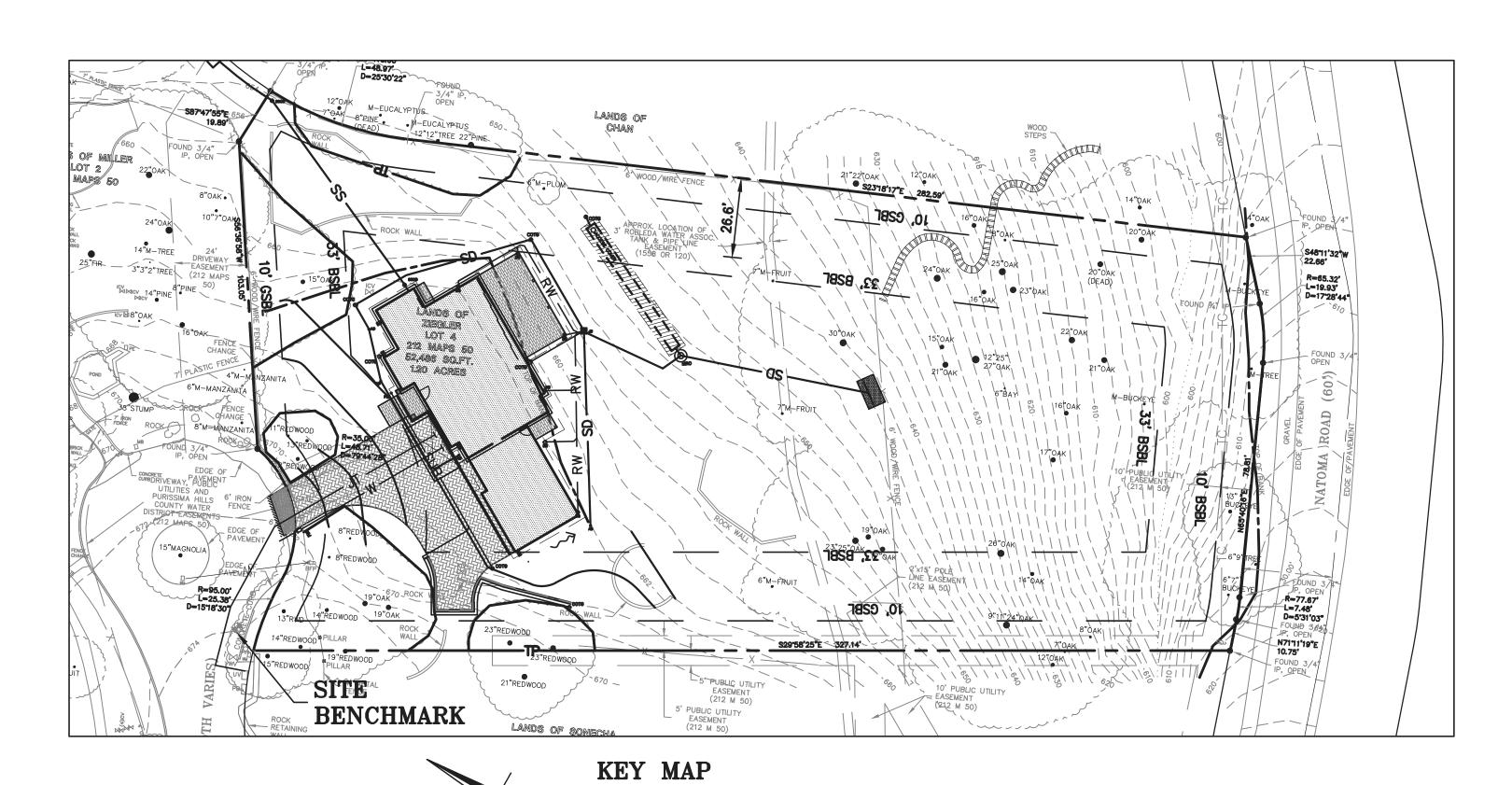
LEGEND

DESCRIPTION

EXISTING

ZIEGLER RESIDENCE 27474 SUNRISE FARM RD. LOS ALTOS HILLS, CALIFORNIA





ABBREVIATIONS

AGGREGATE BASE

JUNCTION BOX

JOINT UTILITY POLE

JOINT TRENCH

ASPHALT CONCRETE LINEAR FEET ACCESSIBLE MAXIMUM **MANHOLE** AREA DRAIN MINIMUM BEGINNING OF CURVE **BEARING & DISTANCE MONUMENT** BENCHMARK NEW BUILDING SETBACK LINE NUMBER BW/FG BOTTOM OF WALL/FINISH NOT TO SCALE GRADE ON CENTER CATCH BASIN CURB AND GUTTER PLANTING AREA CENTER LINE **PEDESTRIAN** CORRUGATED PLASTIC PIPE POST INDICATOR VALVE (SMOOTH INTERIOR) PUBLIC SERVICES EASEMENT **CLEANOUT** PROPERTY LINE CLEANOUT TO GRADE POWER POLE CONC CONCRETE PUBLIC UTILITY EASEMENT CONSTRUCT or -TION CONST POLYVINYL CHLORIDE CONC COR CONCRETE CORNER CUBIC YARD REINFORCED CONCRETE PIPE DIAMETER **RIM ELEVATION** DROP INLET RAINWATER DUCTILE IRON PIPE RIGHT OF WAY END OF CURVE SEE ARCHITECTURAL DRAWINGS **EXISTING GRADE** SANITARY **ELEVATIONS** STORM DRAIN **EDGE OF PAVEMENT** STORM DRAIN MANHOLE **EQUIPMENT** EACH WAY SEE LANDSCAPE DRAWINGS **EXISTING** SPECIFICATION FACE OF CURB SANITARY SEWER FINISHED FLOOR SANITARY SEWER CLEANOUT FINISHED GRADE SANITARY SEWER MANHOLE FIRE HYDRANT STREET FLOW LINE **STATION** FINISHED SURFACE **STANDARD STRUCT** STRUCTURAL GAGE OR GAUGE TELEPHONE GRADE BREAK TOP OF CURB GRADING SETBACK LINE **TEMPORARY** HIGH DENSITY CORRUGATED TOP OF PAVEMENT POLYETHYLENE PIPE TOP OF WALL/FINISH GRADE HORIZONTAL TYPICAL HIGH POINT VERTICAL CURVE HUB & TACK VITRIFIED CLAY PIPE INSIDE DIAMETER VERTICAL INVERT ELEVATION

WATER LINE

WATER METER

WELDED WIRE FABRIC

ENCROACHMENT PERMIT FOR CONSTRUCTION IN THE STREET REQUIRE CONSTRUCTION CONDUCTED IN THE TOWN RIGHT-OF-WAY MUST HAVE A "PERMIT FOR CONSTRUCTION IN THE STREET" THAT MUST BE OBTAINED FROM THE PUBLIC WORKS DEPARTMENT PRIOR TO COMMENCEMENT OF WORK. ANY CONSTRUCTION WITHIN THE PUBLIC RIGHT-OF-WAY, EASEMENTS, OR OTHER PROPERTY CONTROLLED BY THE CITY/TOWN/COUNTY MUST CONFORM TO STANDARDS ESTABLISHED IN THE TOWN STANDARD SPECIFICATIONS FOR THE UTILITIES DEPT. AND THE PUBLIC WORKS DEPT.

1" = 30'

CONTRACTOR TO CONTACT USA 48 HOURS PRIOR TO CONSTRUCTION/ EXCAVATION IN THE RIGHT-OF-WAY.

ANY/ALL PUBLIC IMPROVEMENTS THAT ARE DAMAGED BY THE OWNER OR HIS/HER CONTRACTOR WHILE WORKING ON THIS PROJECT WILL BE THE RESPONSIBILITY OF THE OWNER TO REPAIR, RESTORE, OR REPLACE IN KIND. REPLACEMENT, REPAIR, OR RESTORATION WORK MUST BE IN COMPLIANCE WITH THE TOWN STANDARD SPECIFICATIONS FOR CONSTRUCTION IN THE PUBLIC RIGHT-OF-WAY.

REQUIRED DRAINAGE INSPECTIONS

THE TOWN OF LOS ALTOS HILLS REQUIRES LEA & BRAZE ENGINEERING, INC. TO INSPECT ALL STORM DRAINAGE AS IT IS INSTALLED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT LEA & BRAZE ENGINEERING, INC. PRIOR TO START OF CONSTRUCTION TO SET UP A PRE-CONSTRUCTION MEETING, AND TO CALL AT LEAST 48 HOURS IN ADVANCE OF ANY INSPECTIONS. PIPES ARE TO REMAIN UNCOVERED UNTIL AN INSPECTION OCCURS.

POINT OF CONTACT: PETER CARLINO LEA & BRAZE ENGINEERING, INC. (510)887-4086 pcarlino@leabraze.com

VICINITY MAP

OWNER'S INFORMATION

960 N. SAN ANTONIO ROAD, UNIT 236 LOS ALTOS, CA 94022

APN: 182-11-064

REFERENCES

LOS ALTOS HILLS. CA

DATED: 12-9-20

- THIS GRADING AND DRAINAGE PLAN IS SUPPLEMENTAL TO: . TOPOGRAPHIC SURVEY BY LEA AND BRAZE ENGINEERING "TOPOGRAPHIC SURVEY" 27474 SUNRISE FARM LOS ALTOS HILLS, CA DATED: 12-18-20 JOB# 2201396
- 2. SITE PLAN BY KOHLSAAT AND ASSOCIATES, "THE ZIEGLER RESIDENCE" 27474 SUNRISE FARM
- 3. SOIL REPORT BY ROMIG ENGINEER ENTITLED: "GEOLOGIC AND GEOTECHNICAL INVESTIGATION" 27474 SUNRISE FARM LOS ALTOS HILLS, CA DATED: 9-18-20 JOB#: 5173-1

THE CONTRACTOR SHALL REFER TO THE ABOVE NOTED SURVEY AND PLAN, AND SHALL VERIFY BOTH EXISTING AND PROPOSED ITEMS ACCORDING TO THEM.

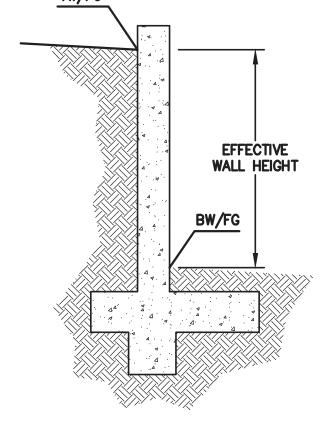
SHEET INDEX

1	C-1.0	TITLE SHEET
2	C-1.1	OVERALL SITE PLAN
3	C - 2.0	GRADING & DRAINAGE PLAN
4	C-2.1	GRADING & DRAINAGE PLAN
5	C - 3.0	UTILITY PLAN
6	C - 3.1	UTILITY PLAN
7	C-4.0	DRIVEWAY PROFILE
8	C-4.1	SITE SECTION A-A
9	C - 4.2	SITE SECTION B-B
10	C-5.0	DETAILS
11	C-5.1	TOWN OF LOS ALTOS HILLS DETAILS

 $12 \quad C-6.0$ GRADING SPECIFICATIONS ER-1 **EROSION CONTROL** 14 ER-2 EROSION CONTROL DETAILS

RETAINING WALL NOTES

- 1. TW/FG REPRESENTS FINISHED EARTHEN GRADE OR PAVEMENT ELEVATION AT TOP OF WALL, NOT ACTUAL TOP OF WALL MATERIAL. BW/FG REPRESENTS FINISH EARTHEN GRADE OR PAVEMENT ELEVATION AT BOTTOM OF WALL NOT INCLUDING FILL FOUNDATION. GRADES INDICATED ON THESE PLANS REFER TO THE FINISHED GRADES ADJACENT TO THE RETAINING WALL, NOT INCLUDING FOOTING,
- 2. DIMENSIONS SHOWN DENOTE THE EFFECTIVE WALL HEIGHT ONLY. THE ACTUAL WALL HEIGHT AND DEPTH MAY DIFFER DUE TO CONSTRUCTION REQUIREMENTS.
- 3. REFER TO SPECIFIC WALL CONSTRUCTION DETAIL FOR STRUCTURAL ELEMENTS, FREEBOARD, AND EMBEDMENT.
- 4. REFER TO ARCHITECTURAL, LANDSCAPE ARCHITECTURE, AND/OR STRUCTURAL PLANS FOR DETAILS, WALL ELEVATIONS, SUBDRAINAGE, WATERPROOFING, FINISHES, COLORS, STEEL REINFORCING, MATERIALS, ETC. PROVIDE CLIPS OR OTHER MEANS OF SECURING FINISH MATERIALS AS NECESSARY (WET SET INTO
- 5. ALL RETAINING WALLS SHOULD HAVE A BACK-OF-WALL SUB-SURFACE DRAINAGE SYSTEM TO PREVENT HYDROSTATIC PRESSURE.
- 6. PROVIDE GUARDRAIL (WHERE APPLICABLE AND DESIGNED BY OTHERS) AS REQUIRED FOR GRADE SEPARATION OF 30 INCHES OR MORE MEASURED 5' HORIZONTALLY FROM FACE OF WALL, PER CBC.



ESTIMATED EARTHWORKS QUANTITIES

LOTIMATED LAWI		QUANTITIOD
CUT CUT (SITE GRADING) CUT (WITHIN BUILDING FOOTPRINT)	225 CU.YD. 295 CU.YD.	MAX. DEPTH 4 FEET (DRIVEWAY) N/A (WITHIN BUILDING FOOTPRIN
CUT TOTAL OVERALL VOLUME	520 CU.YD.	
FILL FILL (SITE GRADING) FILL (WITHIN BUILDING FOOTPRINT)	0 CU.YD. 0 CU.YD.	MAX. DEPTH N/A N/A WITHIN BUILDING FOOTPRINT
FILL TOTAL OVERALL VOLUME	0 CU.YD.	
TOTAL EXPORT:	520 CU.YD.	

-0- CU.YD.

NOTE: GRADING QUANTITIES REPRESENT BANK YARDAGE. IT DOES NOT INCLUDE ANY SWELLING OR SHRINKAGE FACTORS AND IS INTENDED TO REPRESENT IN-SITU CONDITIONS. QUANTITIES DO NOT INCLUDE OVER-EXCAVATION, TRENCHING, STRUCTURAL FOUNDATIONS OR PIERS, OR POOL EXCAVATION (IF ANY). NOTE ADDITIONAL EARTHWORKS, SUCH AS KEYWAYS OR BENCHING MAY BE REQUIRED BY THE GEOTECHNICAL ENGINEER IN THE FIELD AT TIME OF CONSTRUCTION. CONTRACTOR TO **VERIFY QUANTITIES**

FOR CONSTRUCTION STAKING **SCHEDULING OR QUOTATIONS** PLEASE CONTACT ALEX ABAYA AT LEA & BRAZE ENGINEERING (510)887-4086 EXT 116. aabaya@leabraze.com



REVISIONS 2201397 JOB NO: 02-19-2 AS NOTED DESIGN BY: TT CHECKED BY: RB SHEET NO:

PC #1 RESPONSES 03-12-21

2 L05





LDLAND—URBAN INTERFACE: THIS PROJECT IS LOCATED WITHIN THE DESIGNATED WILDLAND URBAN INTERFACE FIRE AREA. THE BUILDING CONSTRUCTION SHALL COMPLY WITH THE PROVISIONS OF CALIFORNIA BUILDING CODE (CBC) CHAPTER 7 A. NOTE THAT VEGETATION CLEARANCE SHALL BE IN COMPLIANCE WITH CBC SECTION 701A.3.2.4 PRIOR TO PROJECT FINAL

APPROVAL. CHECK WITH THE PLANNING DEPARTMENT FOR RELATED LANDSCAPE PLAN

AREA OF DETAIL -

REQUIREMENTS.

2. FIRE SPRINKLERS REQUIRED: AN AUTOMATIC RESIDENTIAL FIRE SPRINKLER SYSTEM SHALL BE INSTALLED IN ONE- AND TWO-FAMILY DWELLINGS AS FOLLOWS: IN ALL NEW ONE- AND TWO-FAMILY DWELLINGS AND IN EXISTING ONE- AND TWO-FAMILY DWELLINGS WHEN ADDITIONS ARE MADE THAT INCREASE THE BUILDING AREA TO MORE THAN 3,600 SQUARE FEET. EXCEPTION: A ONE-TIME ADDITION TO AN EXISTING BUILDING THAT DOES NOT TOTAL MORE THAN 1,000 SQUARE FEET OF BUILDING AREA. NOTE: THE OWNER(S), OCCUPANT(S) AND ANY CONTRACTOR(S) OR SUBCONTRACTOR(S) ARE RESPONSIBLE FOR CONSULTING WITH THE WATER PURVEYOR OF RECORD IN ORDER TO DETERMINE IF ANY MODIFICATION OR UPGRADE OF THE EXISTING WATER SERVICE IS REQUIRED. NOTE: COVERED PORCHES, PATIOS, BALCONIES, AND ATTIC SPACES MAY REQUIRE FIRE SPRINKLER COVERAGE. FOR BUILDINGS IN EXCESS OF 6200 SQUARE FEET, THE (4) FOUR MOST HYDRAULICALLY DEMANDING HEADS IN A ROOM OR COMPARTMENT SHALL BE CALCULATED. FIRE DEPARTMENT CONNECTION: FOR BUILDINGS IN EXCESS OF 6200 SQUARE FEET, A FIRE DEPARTMENT CONNECTION (FDC) SHALL BE PROVIDED. THE FDC SHALL CONSIST OF AT LEAST ONE 2.5" HOSE CONNECTION THAT IS CONNECTED TO THE SPRINKLER RISER WITH A PIPE NOT LESS THAN THE DIAMETER OF THE SPRINKLER RISER. A STATE OF CALIFORNIA LICENSED (C-16) FIRE PROTECTION CONTRACTOR SHALL SUBMIT PLANS, CALCULATIONS, A COMPLETED PERMIT APPLICATION AND APPROPRIATE FEES TO THIS DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO BEGINNING THEIR WORK. SECTION R313.2 AS ADOPTED AND AMENDED BY LOS ALTOS HILLS MUNICIPAL CODE.

3. WATER SUPPLY REQUIREMENTS: POTABLE WATER SUPPLIES SHALL BE PROTECTED FROM CONTAMINATION CAUSED BY FIRE PROTECTION WATER SUPPLIES. IT IS THE RESPONSIBILITY OF THE APPLICANT AND ANY CONTRACTORS AND SUBCONTRACTORS TO CONTACT THE WATER PURVEYOR SUPPLYING THE SITE OF SUCH PROJECT, AND TO COMPLY WITH THE REQUIREMENTS OF THAT PURVEYOR. SUCH REQUIREMENTS SHALL BE INCORPORATED INTO THE DESIGN OF ANY WATER-BASED FIRE PROTECTION SYSTEMS, AND / OR FIRE SUPPRESSION WATER SUPPLY SYSTEMS OR STORAGE CONTAINERS THAT MAY BE PHYSICALLY CONNECTED IN ANY MANNER TO AN APPLIANCE CAPABLE OF CAUSING CONTAMINATION OF THE POTABLE WATER SUPPLY OF THE PURVEYOR OF RECORD. FINAL APPROVAL OF THE SYSTEM(S) UNDER CONSIDERATION WILL NOT BE GRANTED BY THIS OFFICE UNTIL COMPLIANCE WITH THE REQUIREMENTS OF THE WATER PURVEYOR OF RECORD ARE DOCUMENTED BY THAT PURVEYOR AS HAVING BEEN MET BY THE APPLICANT(S). 2010 CFC SEC. 903.3.5 AND HEALTH AND SAFETY CODE 13114.7

4. CONSTRUCTION SITE FIRE SAFETY: ALL CONSTRUCTION SITES MUST COMPLY WITH APPLICABLE PROVISIONS OF THE CFC CHAPTER 33 AND SANTA CLARA COUNTY FIRE DEPARTMENT STANDARD DETAIL AND SPECIFICATION SI-7. PROVIDE APPROPRIATE NOTATIONS ON SUBSEQUENT PLAN SUBMITTALS, AS APPROPRIATE TO THE PROJECT. CFC CHP. 33

5. PREMISES IDENTIFICATION: NEW AND EXISTING BUILDINGS SHALL HAVE APPROVED ADDRESS NUMBERS, BUILDING NUMBERS, OR APPROVED BUILDING IDENTIFICATION PLACED IN A POSITION THAT IS PLAINLY LEGIBLE AND VISIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY. THESE NUMBERS SHALL CONTRAST WITH THEIR BACKGROUND. ADDRESS NUMBERS SHALL BE ARABIC NUMBERS OR ALPHABETICAL LETTERS. NUMBERS SHALL BE A MINIMUM OF 4 INCHES HIGH WITH A MINIMUM STROKE WIDTH OF 0.5 INCH. WHERE ACCESS IS BY MEANS OF A PRIVATE ROAD AND THE BUILDING CANNOT BE VIEWED FROM THE PUBLIC WAY, A MONUMENT, POLE, OR OTHER SIGN OR MEANS SHALL BE USED TO IDENTIFY THE STRUCTURE CFC SECTION. 505.1

6. FIRE APPARATUS (ENGINE) ACCESS DRIVEWAY REQUIRED: PROVIDE AN ACCESS DRIVEWAY WITH A PAVED ALL WEATHER SURFACE. A MINIMUM UNOBSTRUCTED WIDTH OF 14 FEET, VERTICAL CLEARANCE OF 13 FEET 6 INCHES, MINIMUM CIRCULATING TURNING RADIUS OF 36 FEET OUTSIDE AND 23 FEET INSIDE, AND A MAXIMUM SLOPE OF 15%. INSTALLATIONS SHALL CONFORM TO FIRE DEPARTMENT STANDARD DETAILS AND SPECIFICATIONS SHEET D-1. THIS IS ILLUSTRATED 011 CURRENT PLA11S CFC SEC. 503

GENERAL NOTES FOR SEWER LATERAL CONNECTIONS

- OWN STANDARD DETAILS. CONSTRUCTION STANDARDS. AND THE CITY ENGINEER.
- THE APPROVAL OF THESE PLANS BY THE TOWN SHALL BE INTERPRETED TO MEAN THAT THE SANITAR SEWER DESIGN SHOWN ON THESE PLANS MEETS THE TOWN'S STANDARDS. THE TOWN'S APPROVAL IN
- NSPECTOR INFORMED OF HIS SCHEDULE FOR SANITARY SEWER WORK.
- 6. PRIOR TO COMMENCEMENT OF EXCAVATION WORK, THE CONTRACTOR SHALL CONTACT ALL UTILITY FORTY-EIGHT (48) HOURS PRIOR TO START OF CONSTRUCTION.

- CONTRACTOR SHALL OBTAIN ENCROACHMENT PERMIT PRIOR TO ANY WORK IN THE TOWN RIGHT-OF-WAY. A PRECONSTRUCTION MEETING IS REQUIRED WITH THE PUBLIC WORKS DEPARTMENT.
- 10. APPLICANT SHALL PROVIDE SUFFICIENT DEPOSIT TO THE TOWN FOR INSPECTION, TESTING, COMMUNITY OUTREACH, STAFF TIME, ARBORIST, TRAFFIC CONSULTANTS, SAFETY SPECIALIST AND OTHER SERVICES AS DETERMINED BY THE CITY ENGINEER. ANY OUTSTANDING DEPOSIT SHALL BE PAID IN FULL PRIOR TO
- FINAL SIGN OFF. 11. SEWER CONNECTION PERMITS SHALL BE ISSUED BY THE TOWN FOR ALL PROPOSED NEW CONNECTIONS. 12. EXISTING SANITARY SEWER SERVICE SHALL BE MAINTAINED AT ALL TIMES. THE CONTRACTOR SHALL USE WHATEVER MEANS NECESSARY (E.G. PUMPS, BYPASS LINES, ETC.) TO MAINTAIN THIS SERVICE
- DURING CONSTRUCTION. 13. PRIOR TO COMMENCING ANY SANITARY SEWER WORK IN EASEMENTS, THE CONTRACTOR SHALL PROVIDE THE TOWN WITH ADEQUATE EVIDENCE THAT ALL AFFECTED PROPERTY OWNERS (AND TENANTS WHERE APPLICABLE) WERE NOTIFIED FORTY-EIGHT (48) HOURS PRIOR TO THE DATE OF WORK AND THAT THEY HAVE UPDATED THAT NOTICE IN A TIMELY MANNER WHEN THOSE DATES HAVE CHANGED.
- 14. ALL SANITARY SEWER WORK CONSTRUCTED WITHOUT INSPECTION BY THE TOWN SHALL BE REMOVED AND RECONSTRUCTED WITH INSPECTION.
- 15. ALL SANITARY SEWER LATERALS SHALL BE 4" PVC-SDR 26 OR APPROVED EQUAL, ONE PER LOT AND MARKED WITH THE LETTER 'S' ON A POST PER TOWN'S STANDARDS.
- 16. SEWER MAINS SHALL BE MINIMUM OF 8" PVC-SDR 26 OR APPROVED EQUAL AND HAVE (A) 1% MINIMUM SLOPE OR AS APPROVED BY THE CITY ENGINEER, AND (B) MINIMUM SELF-CLEANING VELOCITY OF 2 FEET PER SECOND.
- 17. SEWER LATERALS SHALL BE A MINIMUM OF 4' BELOW TOP OF CURB OR FINISHED GROUND AT PROPERTY LINE UNLESS AUTHORIZED BY THE CITY ENGINEER.
- 18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ELEVATION OF ALL EXISTING STORM DRAINS AND SEWERS TO BE EXTENDED OR CONNECTED PRIOR TO COMMENCING WORK.
- 19. TRAFFIC CONTROL PLAN SHALL BE PREPARED BY A LICENSED TRAFFIC ENGINEER. TRAFFIC CONTROL PLAN SHALL BE IN ACCORDANCE WITH TOWN'S CONSTRUCTION STANDARDS AND SUBJECT TO REVIEW AND APPROVAL OF THE CITY ENGINEER PRIOR TO PERMIT ISSUANCE. 20. TWO OPEN TRAFFIC LANES ARE REQUIRED DURING ALL NON-WORKING HOURS. ONE TRAVEL LANE MAY
- BE CLOSED DURING WORK HOURS WHEN FLAGGERS ARE PRESENT
- 21. SEWER TRENCHES AND PERMANENT PAVEMENT WITHIN RIGHT-OF-WAY AND/OR EASEMENTS SHALL CONFORM TO TOWN'S STANDARD DETAIL UT-1 AND UT-2.
- 22. THE CONTRACTOR SHALL PLACE TEMPORARY FORM FITTING PIECES OF PLYWOOD OR OTHER SUITABLE MATERIAL OVER THE BOTTOMS OF THE MANHOLES TO PREVENT ENTRY OF FOREIGN MATERIALS FROM THE MANHOLE TO THE PIPE.
- 23. NO OPEN TRENCHES IN THE STREET RIGHT-OF-WAY WILL BE ALLOWED OVERNIGHT. ALL TRENCHES SHALL BE BACKFILL THE SAME DAY THE TRENCH WAS EXCAVATED, EXCEPT THAT PORTION OF THE TRENCH OR EXCAVATION TO BE USED FOR CONNECTING THE EXTENSION OF THE INSTALLATION. THAT SAID PORTION SHALL BE ADEQUATELY BARRICADED AND PROTECTED TO THE SATISFACTION OF THE CITY ENGINEER OR HIS REPRESENTATIVE. EXCAVATIONS OR TRENCHES FOR POURED IN PLACE CONCRETE MANHOLE MAY REMAIN OPEN FOR A PERIOD NOT TO EXCEED SEVEN DAYS, PROVIDING SAID EXCAVATION OR TRENCHES ARE ADEQUATELY BARRICADED, FENCED, AND PLATED WITH SKID RESISTANT STEEL PLATE OF ADEQUATE THICKNESS AND FLUSHED WITH PAVEMENT. THE NUMBER OF PLATES TO BE UTILIZED EACH DAY SHALL BE APPROVED BY THE CITY ENGINEERING OR HIS REPRESENTATIVE.
- 24. ALL UTILITY FRAMES AND COVERS, EXISTING AND PROPOSED MONUMENTS, SHALL BE BROUGHT TO FINISH GRADE AFTER FINISHED PAVING.
- 25. 'TRACER WIRE' SHALL BE INSTALLED ALONG THE TOP OF THE PIPE FOR ALL SECTIONS OF THE SEWER LINE. THE WIRE SHALL BE SOLID COPPER AWG #10 WITH AN INSULATED JACKET. DETECTOR TAPE SHALL ALSO BE INSTALLED WITHIN TOP 12" OF PAVEMENT.
- 26. SANITARY SEWER MAINS SHALL BE FLUSHED, MANDRELED, AIR TESTED, AND VIDEO TAPED IN ACCORDANCE WITH TOWN'S TESTING AND RETESTING REQUIREMENTS.
- 27. CONTRACTOR SHALL SUBMIT VIDEO INSPECTION CD/DVD TO THE TOWN FOR REVIEW AND APPROVAL OF THE CITY ENGINEER PRIOR TO ACCEPTANCE OF THE SEWER MAIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DEFECTIVE SECTIONS OBSERVED IN THE VIDEO INSPECTION TO CITY ENGINEER'S SATISFACTION.
- 28. IN AREAS WHERE THE EXISTING ROAD PAVEMENT IS TRENCHED FOR INSTALLATION OF THE SEWER MAIN, CONTRACTOR SHALL RESTORE THE PAVEMENT PER TOWN OF LOS ALTOS HILLS STANDARDS. IF THE TRENCH IS MORE THAN 300 FEET LONG, THE STREET SHALL BE SLURRY SEALED. IN THE CASE WHERE SLURRY SEAL IS NOT SUITABLE AS DETERMINED BY THE TOWN, A FEE MAY BE REQUIRED PRIOR TO PERMIT ISSUANCE.
- 29. AN AS-BUILT MYLAR PLAN, CONSISTS OF LOCATIONS OF ALL SEWER MAIN AND LATERAL WYES IN THE MAIN TRUNK WITH REFERENCE TO MANHOLES, SHALL BE SUBMITTED PRIOR TO ACCEPTANCE OF THE
- 30. THE TOWN IS NOT RESPONSIBLE FOR CLEANING PRIVATE SEWER LATERALS. THE PROPERTY OWNER IS FULLY RESPONSIBLE FOR MAINTENANCE, REPAIR, AND REPLACEMENT OF THE (A) LATERAL FROM THE HOLISE TO THE MAIN INCLUDING WAS CONNECTION AT THE MAIN (B) UNEDELOW AND (C) BYCKELOM

RE 0 0

PC #1 RESPONSES \ 03-12-21 REVISIONS JOB NO: 2201397 DATE: 02-19-2 AS NOTED SCALE: ESIGN BY: TT

SHEET NO:

CHECKED BY: RB

FOR CONSTRUCTION STAKING SCHEDULING OR QUOTATIONS PLEASE CONTACT ALEX ABAYA AT LEA & BRAZE ENGINEERING (510)887-4086 EXT 116. aabaya@leabraze.com

AREA OF DETAIL -

* BUILDING PAD NOTE: ADJUST PAD LEVEL AS REQUIRED. REFER TO STRUCTURAL PLANS FOR SLAB SECTION OR CRAWL SPACE DEPTH TO ESTABLISH PAD LEVEL.

DRIVEWAYS, AND PUBLIC AND PRIVATE ROADWAYS, PRIOR TO FINAL INSPECTION AND RELEASE OF OCCUPANCY PERMITS AND SHALL PROVIDE THE TOWN WITH PHOTOGRAPHS OF THE EXISTING CONDITIONS OF THE ROADWAYS AND PATHWAYS PRIOR TO ACCEPTANCE OF PLANS FOR BUILDING PLAN CHECK. <u>ENCROACHMENT PERMIT FOR CONSTRUCTION IN THE STREET REQUIRED</u>

NOTE:
THE PROPERTY OWNER SHALL INFORM THE TOWN

DAMAGE CAUSED BY THE CONSTRUCTION OF THE

OF ANY DAMAGE AND SHALL REPAIR ANY

PROJECT TO THE PATHWAYS, PRIVATE

CONSTRUCTION CONDUCTED IN THE TOWN RIGHT-OF-WAY MUST HAVE A "PERMIT FOR CONSTRUCTION IN THE STREET" THAT MUST BE OBTAINED FROM THE PUBLIC WORKS DEPARTMENT PRIOR TO COMMENCEMENT OF WORK. ANY CONSTRUCTION WITHIN THE PUBLIC RIGHT-OF-WAY, EASEMENTS, OR OTHER PROPERTY CONTROLLED BY THE CITY/TOWN/COUNTY MUST CONFORM TO STANDARDS ESTABLISHED IN THE TOWN STANDARD SPECIFICATIONS FOR THE UTILITIES DEPT. AND THE PUBLIC WORKS DEPT.

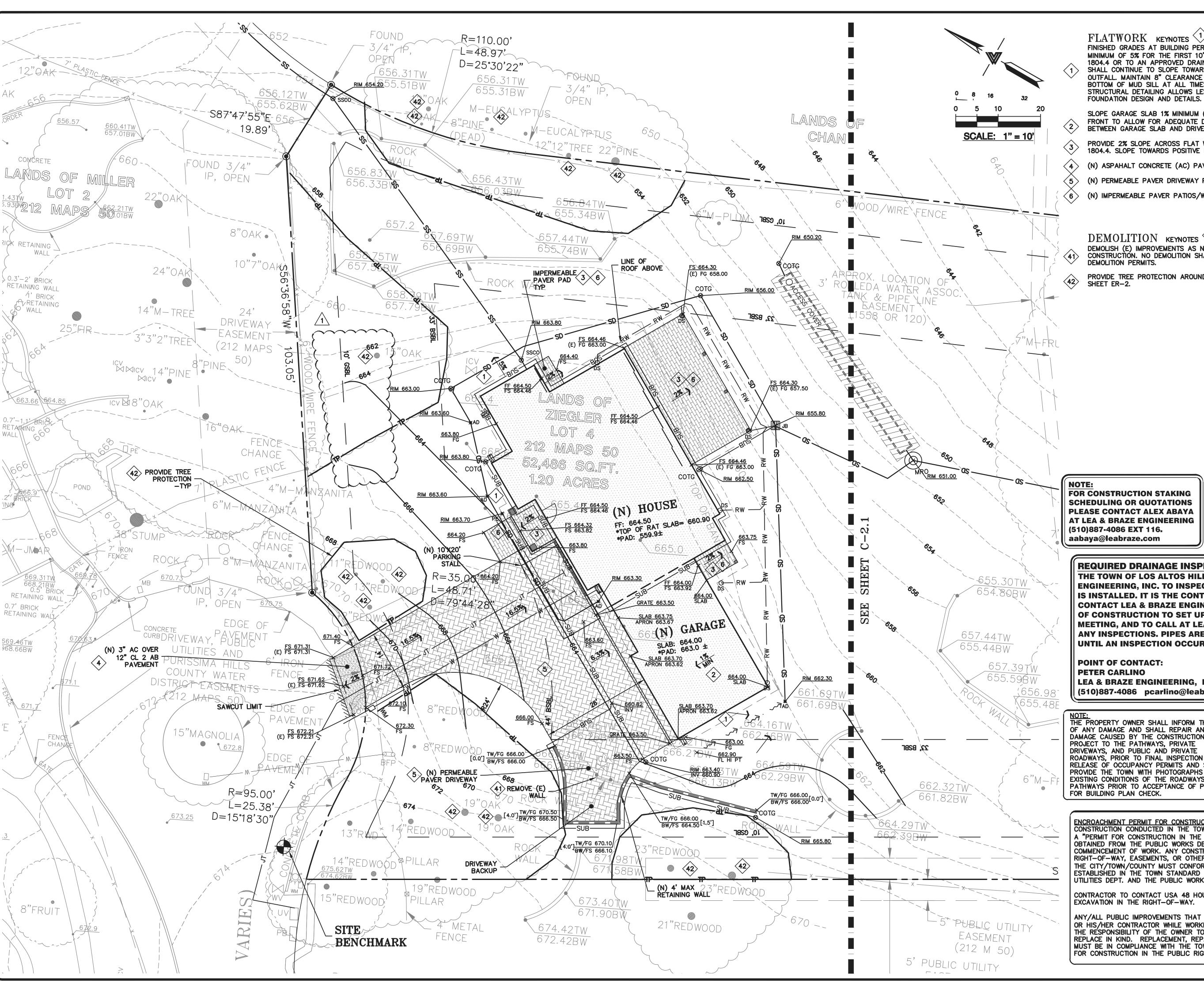
CONTRACTOR TO CONTACT USA 48 HOURS PRIOR TO CONSTRUCTION/

ANY/ALL PUBLIC IMPROVEMENTS THAT ARE DAMAGED BY THE OWNER OR HIS/HER CONTRACTOR WHILE WORKING ON THIS PROJECT WILL BE THE RESPONSIBILITY OF THE OWNER TO REPAIR, RESTORE, OR REPLACE IN KIND. REPLACEMENT, REPAIR, OR RESTORATION WORK MUST BE IN COMPLIANCE WITH THE TOWN STANDARD SPECIFICATIONS FOR CONSTRUCTION IN THE PUBLIC RIGHT-OF-WAY.



REQUIRED DRAINAGE INSPECTIONS THE TOWN OF LOS ALTOS HILLS REQUIRES LEA & BRAZE ENGINEERING, INC. TO INSPECT ALL STORM DRAINAGE AS IT IS INSTALLED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT LEA & BRAZE ENGINEERING, INC. PRIOR TO START OF CONSTRUCTION TO SET UP A PRE-CONSTRUCTION MEETING, AND TO CALL AT LEAST 48 HOURS IN ADVANCE OF EXCAVATION IN THE RIGHT-OF-WAY. ANY INSPECTIONS. PIPES ARE TO REMAIN UNCOVERED **UNTIL AN INSPECTION OCCURS.**

POINT OF CONTACT: PETER CARLINO LEA & BRAZE ENGINEERING, INC. (510)887-4086 pcarlino@leabraze.com



FLATWORK KEYNOTES $\stackrel{(1)}{\checkmark}$ to $\stackrel{(x)}{\checkmark}$ FINISHED GRADES AT BUILDING PERIMETER SHALL BE SLOPED AT A MINIMUM OF 5% FOR THE FIRST 10' AWAY FROM THE BUILDING PER CBC 1804.4 OR TO AN APPROVED DRAINAGE SWALE OR STRUCTURE. GRADES SHALL CONTINUE TO SLOPE TOWARDS POSITIVE DRAINAGE AND A POSITIVE OUTFALL. MAINTAIN 8" CLEARANCE BETWEEN FINISH EARTHEN GRADE AND

BOTTOM OF MUD SILL AT ALL TIMES PER CBC 2304.12.1.2 UNLESS STRUCTURAL DETAILING ALLOWS LESS. REFER TO STRUCTURAL PLANS FOR

SLOPE GARAGE SLAB 1% MINIMUM (1/8" PER FOOT) FROM BACK TO FRONT TO ALLOW FOR ADEQUATE DRAINAGE. MAINTAIN 1/2" TO 1" LIP

- BETWEEN GARAGE SLAB AND DRIVEWAY. SEE PLANS FOR SPECIFIC DROP
- PROVIDE 2% SLOPE ACROSS FLAT WORK AND/OR PAVING PER CBC 1804.4. SLOPE TOWARDS POSITIVE DRAINAGE AS SHOWN ON PLAN.
- (N) ASPAHALT CONCRETE (AC) PAVING AND TIE-IN PER DETAIL 1/C-5.0.
- (N) PERMEABLE PAVER DRIVEWAY PER DETAIL 2/C-5.0.
- (N) IMPERMEABLE PAVER PATIOS/WALKWAYS PER DETAIL 4/C-5.0.

- DEMOLISH (E) IMPROVEMENTS AS NECESSARY TO ACCOMMODATE (N) CONSTRUCTION. NO DEMOLITION SHALL COMMENCE WITHOUT REQUIRED
- PROVIDE TREE PROTECTION AROUND TREES TO REMAIN. SEE DETAIL 6 ON SHEET ER-2.

FOR CONSTRUCTION STAKING **SCHEDULING OR QUOTATIONS** PLEASE CONTACT ALEX ABAYA AT LEA & BRAZE ENGINEERING (510)887-4086 EXT 116. aabaya@leabraze.com

* BUILDING PAD NOTE: ADJUST PAD LEVEL AS REQUIRED. REFER TO STRUCTURAL PLANS FOR SLAB SECTION OR CRAWL SPACE DEPTH TO ESTABLISH PAD LEVEL.

REQUIRED DRAINAGE INSPECTIONS

THE TOWN OF LOS ALTOS HILLS REQUIRES LEA & BRAZE **ENGINEERING, INC. TO INSPECT ALL STORM DRAINAGE AS IT** IS INSTALLED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT LEA & BRAZE ENGINEERING, INC. PRIOR TO START OF CONSTRUCTION TO SET UP A PRE-CONSTRUCTION MEETING, AND TO CALL AT LEAST 48 HOURS IN ADVANCE OF ANY INSPECTIONS. PIPES ARE TO REMAIN UNCOVERED **UNTIL AN INSPECTION OCCURS.**

POINT OF CONTACT: PETER CARLINO LEA & BRAZE ENGINEERING, INC. (510)887-4086 pcarlino@leabraze.com

NOTE: THE PROPERTY OWNER SHALL INFORM THE TOWN OF ANY DAMAGE AND SHALL REPAIR ANY DAMAGE CAUSED BY THE CONSTRUCTION OF THE PROJECT TO THE PATHWAYS, PRIVATE DRIVEWAYS, AND PUBLIC AND PRIVATE ROADWAYS, PRIOR TO FINAL INSPECTION AND RELEASE OF OCCUPANCY PERMITS AND SHALL PROVIDE THE TOWN WITH PHOTOGRAPHS OF THE EXISTING CONDITIONS OF THE ROADWAYS AND PATHWAYS PRIOR TO ACCEPTANCE OF PLANS FOR BUILDING PLAN CHECK.



ENCROACHMENT PERMIT FOR CONSTRUCTION IN THE STREET REQUIRED CONSTRUCTION CONDUCTED IN THE TOWN RIGHT-OF-WAY MUST HAVE A "PERMIT FOR CONSTRUCTION IN THE STREET" THAT MUST BE OBTAINED FROM THE PUBLIC WORKS DEPARTMENT PRIOR TO COMMENCEMENT OF WORK. ANY CONSTRUCTION WITHIN THE PUBLIC RIGHT-OF-WAY, EASEMENTS, OR OTHER PROPERTY CONTROLLED BY THE CITY/TOWN/COUNTY MUST CONFORM TO STANDARDS ESTABLISHED IN THE TOWN STANDARD SPECIFICATIONS FOR THE UTILITIES DEPT. AND THE PUBLIC WORKS DEPT.

CONTRACTOR TO CONTACT USA 48 HOURS PRIOR TO CONSTRUCTION/ EXCAVATION IN THE RIGHT-OF-WAY.

ANY/ALL PUBLIC IMPROVEMENTS THAT ARE DAMAGED BY THE OWNER OR HIS/HER CONTRACTOR WHILE WORKING ON THIS PROJECT WILL BE THE RESPONSIBILITY OF THE OWNER TO REPAIR, RESTORE, OR REPLACE IN KIND. REPLACEMENT, REPAIR, OR RESTORATION WORK MUST BE IN COMPLIANCE WITH THE TOWN STANDARD SPECIFICATIONS FOR CONSTRUCTION IN THE PUBLIC RIGHT-OF-WAY.

LIFORNI RD

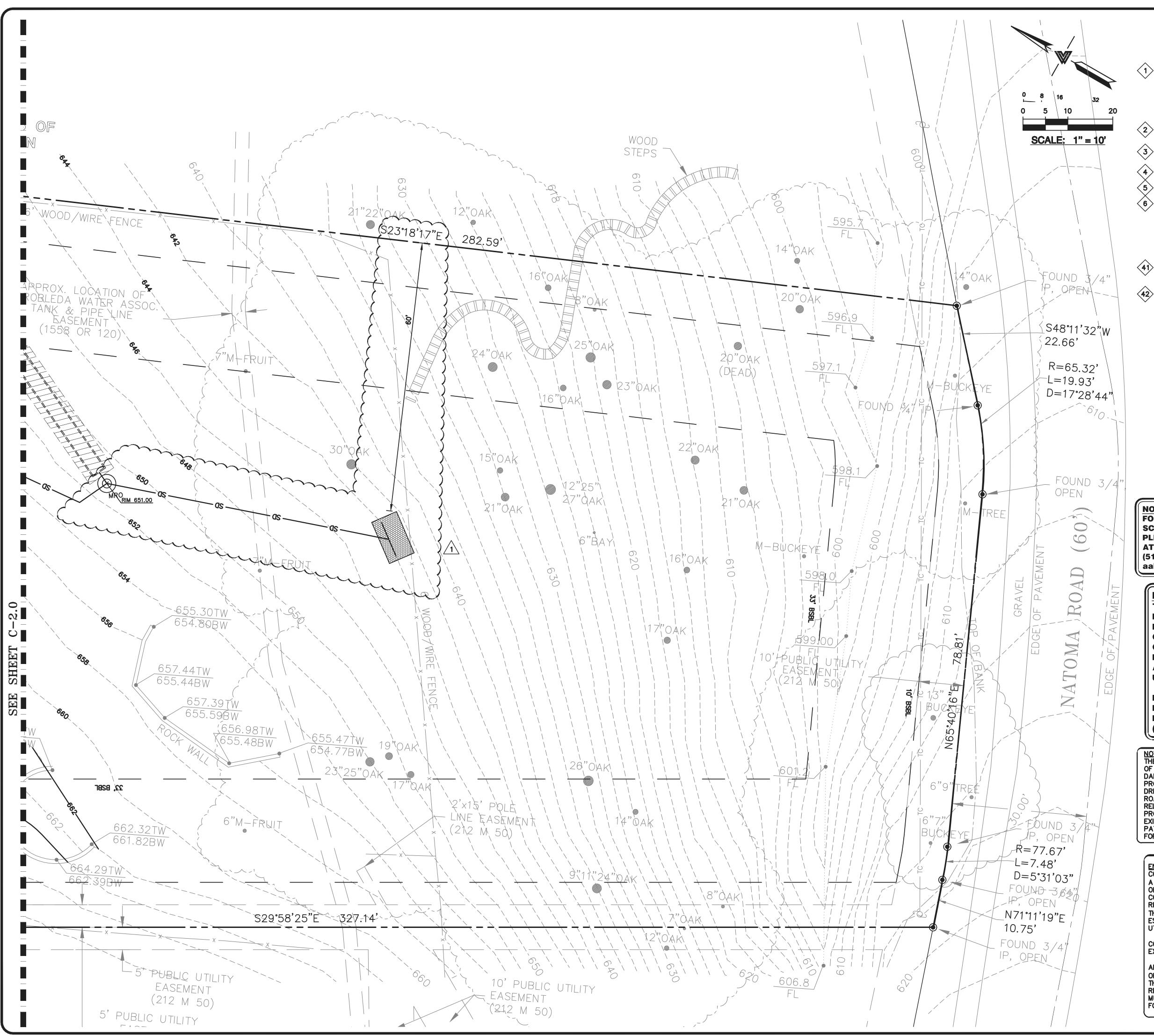
IDENC RE 27 LOS

IN

PC #1 RESPONSES 03-12-21 REVISIONS JOB NO: 2201397 DATE: 02-19-21 SCALE: AS NOTED DESIGN BY: TT

C-2.0 03 OF 07 SHEETS

CHECKED BY: RB



FLATWORK KEYNOTES $\stackrel{(1)}{\checkmark}$ to $\stackrel{(x)}{\checkmark}$

FINISHED GRADES AT BUILDING PERIMETER SHALL BE SLOPED AT A MINIMUM OF 5% FOR THE FIRST 10' AWAY FROM THE BUILDING PER CBC 1804.4 OR TO AN APPROVED DRAINAGE SWALE OR STRUCTURE. GRADES SHALL CONTINUE TO SLOPE TOWARDS POSITIVE DRAINAGE AND A POSITIVE OUTFALL. MAINTAIN 8" CLEARANCE BETWEEN FINISH EARTHEN GRADE AND BOTTOM OF MUD SILL AT ALL TIMES PER CBC 2304.12.1.2 UNLESS STRUCTURAL DETAILING ALLOWS LESS. REFER TO STRUCTURAL PLANS FOR FOUNDATION DESIGN AND DETAILS.

SLOPE GARAGE SLAB 1% MINIMUM (1/8" PER FOOT) FROM BACK TO FRONT TO ALLOW FOR ADEQUATE DRAINAGE. MAINTAIN 1/2" TO 1" LIP BETWEEN GARAGE SLAB AND DRIVEWAY. SEE PLANS FOR SPECIFIC DROP

- PROVIDE 2% SLOPE ACROSS FLAT WORK AND/OR PAVING PER CBC 1804.4. SLOPE TOWARDS POSITIVE DRAINAGE AS SHOWN ON PLAN.
- (N) ASDAHALT CONCRETE (AC) DAVING AND TIE-IN DEP DETAIL 1/C-5.0
- > (N) ASPAHALT CONCRETE (AC) PAVING AND TIE-IN PER DETAIL 1/C-5.0.
- (N) PERMEABLE PAVER DRIVEWAY PER DETAIL 2/C-5.0.
- 6 (N) IMPERMEABLE PAVER PATIOS/WALKWAYS PER DETAIL 4/C-5.0.

DEMOLITION KEYNOTES (41) TO (42)

- DEMOLISH (E) IMPROVEMENTS AS NECESSARY TO ACCOMMODATE (N)
 CONSTRUCTION. NO DEMOLITION SHALL COMMENCE WITHOUT REQUIRED
 DEMOLITION PERMITS.
- PROVIDE TREE PROTECTION AROUND TREES TO REMAIN. SEE DETAIL 6 ON SHEET ER-2.

NOTE:
FOR CONSTRUCTION STAKING
SCHEDULING OR QUOTATIONS
PLEASE CONTACT ALEX ABAYA
AT LEA & BRAZE ENGINEERING
(510)887-4086 EXT 116.
aabaya@leabraze.com

* BUILDING PAD NOTE: ADJUST PAD LEVEL AS REQUIRED. REFER TO STRUCTURAL PLANS FOR SLAB SECTION OR CRAWL SPACE DEPTH TO ESTABLISH PAD LEVEL.

REQUIRED DRAINAGE INSPECTIONS

THE TOWN OF LOS ALTOS HILLS REQUIRES LEA & BRAZE ENGINEERING, INC. TO INSPECT ALL STORM DRAINAGE AS IT IS INSTALLED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT LEA & BRAZE ENGINEERING, INC. PRIOR TO START OF CONSTRUCTION TO SET UP A PRE-CONSTRUCTION MEETING, AND TO CALL AT LEAST 48 HOURS IN ADVANCE OF ANY INSPECTIONS. PIPES ARE TO REMAIN UNCOVERED UNTIL AN INSPECTION OCCURS.

POINT OF CONTACT:
PETER CARLINO
LEA & BRAZE ENGINEERING, INC.
(510)887-4086 pcarlino@leabraze.com

NOTE:
THE PROPERTY OWNER SHALL INFORM THE TOWN OF ANY DAMAGE AND SHALL REPAIR ANY DAMAGE CAUSED BY THE CONSTRUCTION OF THE PROJECT TO THE PATHWAYS, PRIVATE DRIVEWAYS, AND PUBLIC AND PRIVATE ROADWAYS, PRIOR TO FINAL INSPECTION AND RELEASE OF OCCUPANCY PERMITS AND SHALL PROVIDE THE TOWN WITH PHOTOGRAPHS OF THE EXISTING CONDITIONS OF THE ROADWAYS AND PATHWAYS PRIOR TO ACCEPTANCE OF PLANS FOR BUILDING PLAN CHECK.



ENCROACHMENT PERMIT FOR CONSTRUCTION IN THE STREET REQUIRED CONSTRUCTION CONDUCTED IN THE TOWN RIGHT—OF—WAY MUST HAVE A "PERMIT FOR CONSTRUCTION IN THE STREET" THAT MUST BE OBTAINED FROM THE PUBLIC WORKS DEPARTMENT PRIOR TO COMMENCEMENT OF WORK. ANY CONSTRUCTION WITHIN THE PUBLIC RIGHT—OF—WAY, EASEMENTS, OR OTHER PROPERTY CONTROLLED BY THE CITY/TOWN/COUNTY MUST CONFORM TO STANDARDS ESTABLISHED IN THE TOWN STANDARD SPECIFICATIONS FOR THE UTILITIES DEPT. AND THE PUBLIC WORKS DEPT.

CONTRACTOR TO CONTACT USA 48 HOURS PRIOR TO CONSTRUCTION/EXCAVATION IN THE RIGHT-OF-WAY.

ANY/ALL PUBLIC IMPROVEMENTS THAT ARE DAMAGED BY THE OWNER OR HIS/HER CONTRACTOR WHILE WORKING ON THIS PROJECT WILL BE THE RESPONSIBILITY OF THE OWNER TO REPAIR, RESTORE, OR REPLACE IN KIND. REPLACEMENT, REPAIR, OR RESTORATION WORK MUST BE IN COMPLIANCE WITH THE TOWN STANDARD SPECIFICATIONS FOR CONSTRUCTION IN THE PUBLIC RIGHT—OF—WAY.



LAND SURVEYORS
REGIONAL OFFICES:
ROSEVILLE
NUBLIN
AN JOSE

CIVIL ENGINEERS • LAND
JFFICE:
JDUSTRIAL PKWY WEST ROSEVILLE
RD, CALIFORNIA 94545 DUBLIN
S87-4086 SAN JOSE

RESIDENCE ISE FARM RD.,

27474 SUNRISE FAI LOS ALTOS HILLS, CA

GRADING & ORAINAGE PLAN

C-2.1

04 OF 07 SHEETS

CHECKED BY: RB

EXISTING CONDITIONS OF THE ROADWAYS AND

PATHWAYS PRIOR TO ACCEPTANCE OF PLANS

FOR BUILDING PLAN CHECK.

SD K 0 ARM ARM LI H 2 H 27 0S

PC #1 RESPONSES 03-12-21 REVISIONS JOB NO: 2201397 DATE: 02-19-2 AS NOTED SCALE:

DESIGN BY: TT CHECKED BY: RB SHEET NO:

05 OF 07 SHEETS

MUST BE IN COMPLIANCE WITH THE TOWN STANDARD SPECIFICATIONS

FOR CONSTRUCTION IN THE PUBLIC RIGHT-OF-WAY.

STORM DRAIN KEYNOTES (10) TO (25) INSTALL (N) ON-SITE STORM DRAIN SYSTEM. USE N

INSTALL (N) ON-SITE STORM DRAIN SYSTEM. USE MINIMUM 6" PVC (SDR 35) OR HDPE (ADS N-12 W/ SMOOTH INTERIOR WALLS). MAINTAIN 24" MINIMUM COVER AND SLOPED AT 1% MINIMUM AT ALL TIMES UNLESS OTHERWISE NOTED. PROVIDE CLEANOUT TO GRADE AT MAJOR CHANGES IN DIRECTION. AVOID USING 90° BENDS AND INSTEAD USE (2) 45° BENDS AND WYE CONNECTIONS.

INSTALL (N) SUBDRAIN. USE PERFORATED 4" PVC (SDR-35) WITH HOLES DOWN AND SLOPED AT 1% MINIMUM SURROUND WITH 3/4" DRAIN ROCK WRAPPED IN FILTER FABRIC (MIRAFI 140N). MIRADRAIN OR OTHER LEA & BRAZE PREAPPROVED DRAINAGE SYSTEM MAY ALSO BE USED. AVOID USING 90° BENDS AND INSTEAD USE (2) 45° BENDS AND WYE CONNECTIONS. PROVIDE CLEANOUT TO GRADE AT MAJOR CHANGES IN DIRECTION AND AT 100° MAXIMUM INTERVALS. SUBDRAIN SHALL REMAIN A DEDICATED SEPARATE SYSTEM UNTIL IT CONNECTS TO STORM DRAIN

INSTALL (N) PERMEABLE PAVER DRIVEWAY SUBDRAIN PER DETAIL 3/C-5.0.

SYSTEM OR OUTFALL AS SHOWN. SEE DETAIL 6/C-5.1.

- 13 CONSTRUCT (N) EARTHEN SWALE SLOPED AT 1% MINIMUM TOWARDS POSITIVE OUTFALL. SEE DETAIL 5/C-5.0.
- CONNECT RAIN WATER DOWNSPOUTS TO 4" PVC (SDR-35) TIGHTLINE, SLOPED AT 1% MINIMUM. DIRECT TO NEAREST STORM DRAIN LINE AS SHOWN ON PLANS. PROVIDE CLEANOUT TO GRADE AT MAJOR CHANGES IN DIRECTION. AVOID USING 90° BENDS AND INSTEAD USE (2) 45° BENDS. TIGHTLINE MAY BE PLACED IN COMMON TRENCH WITH SUBDRAIN LINES, HOWEVER, DO NOT CONNECT TO SUBDRAIN LINES. SEE DETAIL 7/C-5.0.
- DIRECT DOWNSPOUTS TO 24" LONG PRECAST CONCRETE SPLASHBLOCKS
 OR OTHER HARD SURFACE. DIRECT AWAY FROM ANY STRUCTURE AND
 TOWARDS POSITIVE DRAINAGE. SEE DETAIL 6/C-5.0.
- (16) INSTALL (N) AREA DRAIN (AD) PER DETAIL 8/C-5.0.
- 17> INSTALL (N) CLEANOUT TO GRADE (COTG) PER DETAIL 9/C-5.0.
- (18) INSTALL (N) POPUP EMITTER PER DETAIL 10/C-5.0
- INSTALL (N) "CHRISTY V-24" JUNCTION BOX W/ CONCRETE BOTTOM FLUSH W/ LOWEST OUTGOING INVERT. PLACE BOX ON 6" CLASS 2 AGGREGATE BASE MATERIAL. INSTALL SOLID METAL RIM BOLTED DOWN. SEE DETAIL 3/C-5.1.
- TRENCH DRAINS SHALL BE 6" NDS "DURA-SLOPE" PRESLOPED TRENCH DRAINS W/ TRAFFIC RATED GRATE OR APPROVED EQUAL. CONNECT TO NEAREST STORM DRAIN LINE VIA 4" PVC TIGHTLINE. SEE DETAIL 5/C-5.1.
- (21) INSTALL (N) RETENTION SYSTEM. SEE DETAIL 1/C-5.1.
- 22 INSTALL (N) METERED RELEASE OUTLET (MRO) PER DETAIL 2/C-5.1.
- 23 INSTALL (N) RIP-RAP ENERGY DISSIPATER PER DETAIL 4/C-5.1.

UTILITIES KEYNOTES (31) TO (33)

AT 2% MINIMUM. CONNECT TO (E) SEWER MAIN AS SHOWN. PROVIDE CLEANOUT TO GRADE AT BUILDING AND BEHIND PROPERTY LINE AND AT MAJOR CHANGES IN DIRECTION AS SHOWN. CONNECT PER DISTRICT STANDARDS. SEE SEPARATE SANITARY SEWER PACKAGE FOR CONTINUATION OF SEWER LATERAL CONNECTION TO (E) SEWER MAIN ON BLACK MOUNTAIN ROAD. SEE TOWN STANDARD DETAILS ON SHEET C-5.2.

INSTALL (N) SANITARY SEWER LATERALS. USE 4" PVC (SDR-26) SLOPED

- CONNECT (N) WATER SERVICE FROM (E) BACKFLOW PREVENTER PER
 WATER DISTRICT STANDARDS. UPGRADE (E) WATER METER AND BACKFLOW
 PREVENTER PER WATER DISTRICT STANDARDS AS APPLICABLE. INSTALL
 (N) 2" MINIMUM SERVICE LINE TO (N) RESIDENCE OR AS DIRECTED BY
 FIRE SPRINKLER DESIGNER.
- INSTALL (N) JOINT TRENCH FOR SERVICES INCLUDING GAS, CATV & ELECTRIC FROM NEAREST POINT OF CONNECTION. DESIGN BY OTHERS.

REQUIRED DRAINAGE INSPECTIONS

THE TOWN OF LOS ALTOS HILLS REQUIRES LEA & BRAZE ENGINEERING, INC. TO INSPECT ALL STORM DRAINAGE AS IT IS INSTALLED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT LEA & BRAZE ENGINEERING, INC. PRIOR TO START OF CONSTRUCTION TO SET UP A PRE-CONSTRUCTION MEETING, AND TO CALL AT LEAST 48 HOURS IN ADVANCE OF ANY INSPECTIONS. PIPES ARE TO REMAIN UNCOVERED UNTIL AN INSPECTION OCCURS.

POINT OF CONTACT:
PETER CARLINO
LEA & BRAZE ENGINEERING, INC.
(510)887-4086 pcarlino@leabraze.com

ENCROACHMENT PERMIT FOR CONSTRUCTION IN THE STREET REQUIRED CONSTRUCTION CONDUCTED IN THE TOWN RIGHT—OF—WAY MUST HAVE A "PERMIT FOR CONSTRUCTION IN THE STREET" THAT MUST BE OBTAINED FROM THE PUBLIC WORKS DEPARTMENT PRIOR TO COMMENCEMENT OF WORK. ANY CONSTRUCTION WITHIN THE PUBLIC RIGHT—OF—WAY, EASEMENTS, OR OTHER PROPERTY CONTROLLED BY THE CITY/TOWN/COUNTY MUST CONFORM TO STANDARDS ESTABLISHED IN THE TOWN STANDARD SPECIFICATIONS FOR THE UTILITIES DEPT. AND THE PUBLIC WORKS DEPT.

CONTRACTOR TO CONTACT USA 48 HOURS PRIOR TO CONSTRUCTION/EXCAVATION IN THE RIGHT-OF-WAY.

ANY/ALL PUBLIC IMPROVEMENTS THAT ARE DAMAGED BY THE OWNER OR HIS/HER CONTRACTOR WHILE WORKING ON THIS PROJECT WILL BE THE RESPONSIBILITY OF THE OWNER TO REPAIR, RESTORE, OR REPLACE IN KIND. REPLACEMENT, REPAIR, OR RESTORATION WORK MUST BE IN COMPLIANCE WITH THE TOWN STANDARD SPECIFICATIONS FOR CONSTRUCTION IN THE PUBLIC RIGHT—OF—WAY.



REGIONAL OFFICES:
ROSEVILLE
DUBLIN
SAN JOSE

CIVIL ENGINEERS • LAND
I OFFICE:
INDUSTRIAL PKWY WEST
VARD, CALIFORNIA 94545
DUBLIN
) 887-4086
SAN JOSE

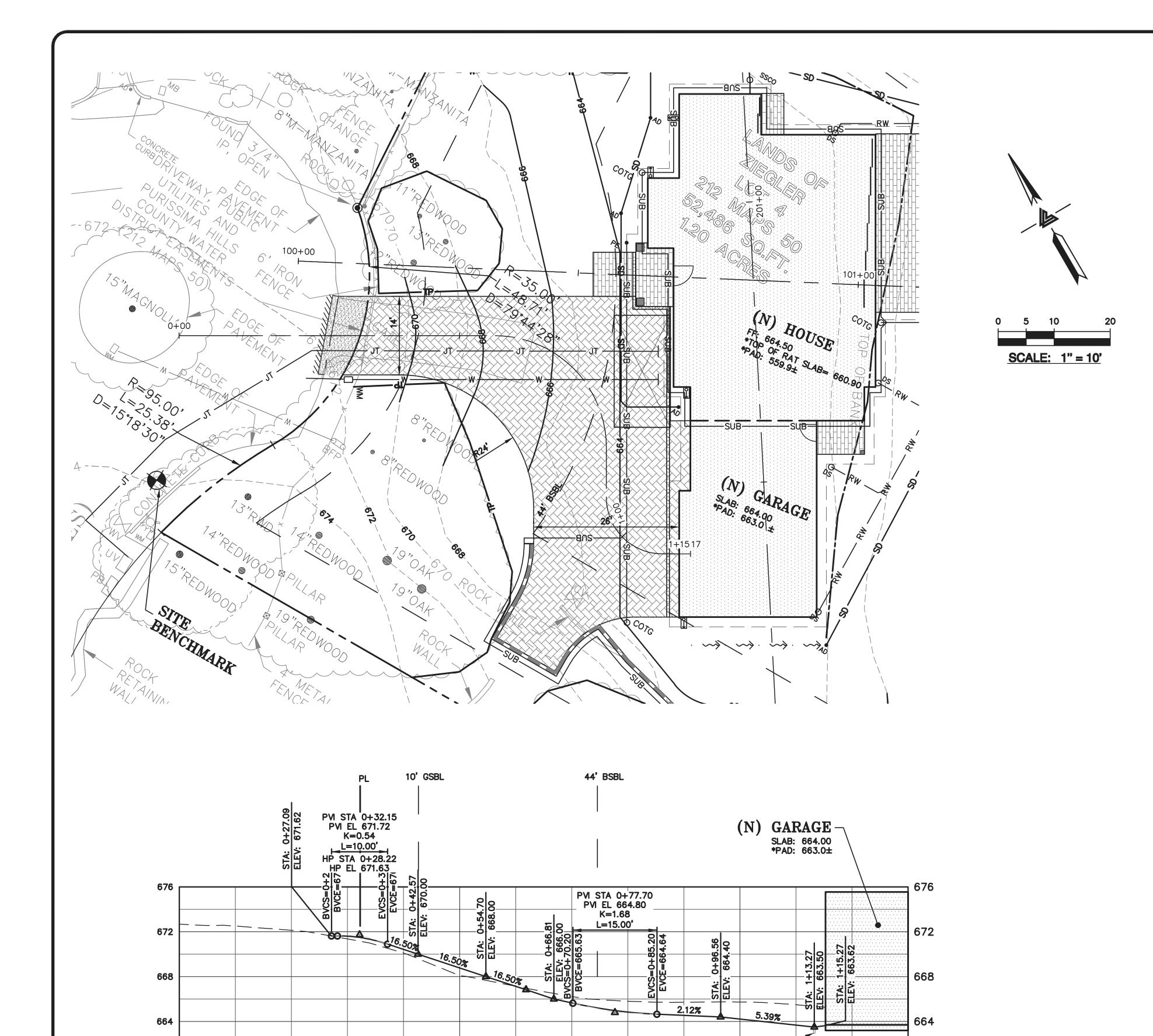
RNIA HAYWARD, CALIFORNIA 9 (510) 887-4086

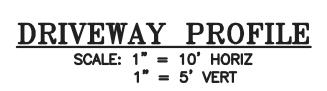
ZIEGLER RESIDENCE 27474 SUNRISE FARM R LOS ALTOS HILLS, CALIFO

TILITY PLAN

C-3.1

CHECKED BY: RB





0+50

DATUM ELEV 660.00 (N) TRENCH DRAIN

1+00

1+30 DATUM ELEV



ERS - LAND SURVEYORS
REGIONAL OFFICES:
ROSEVILLE
DUBLIN
SAN JOSE

LEA & BRAZE ENGINEERIN

CIVIL ENGINEERS • LAND SUR
MAIN OFFICE:
REGIONAL OFF

ZIEGLER RESIDENCE 27474 SUNRISE FARM RD., LOS ALTOS HILLS, CALIFORNI

DRIVEWAY PROFILE

PC #1 RESPONSES 03-12-21	TT
_	_
_	_
_	_
_	_
REVISIONS	BY
JOB NO: 2201	397

 JOB NO:
 2201397

 DATE:
 02-19-21

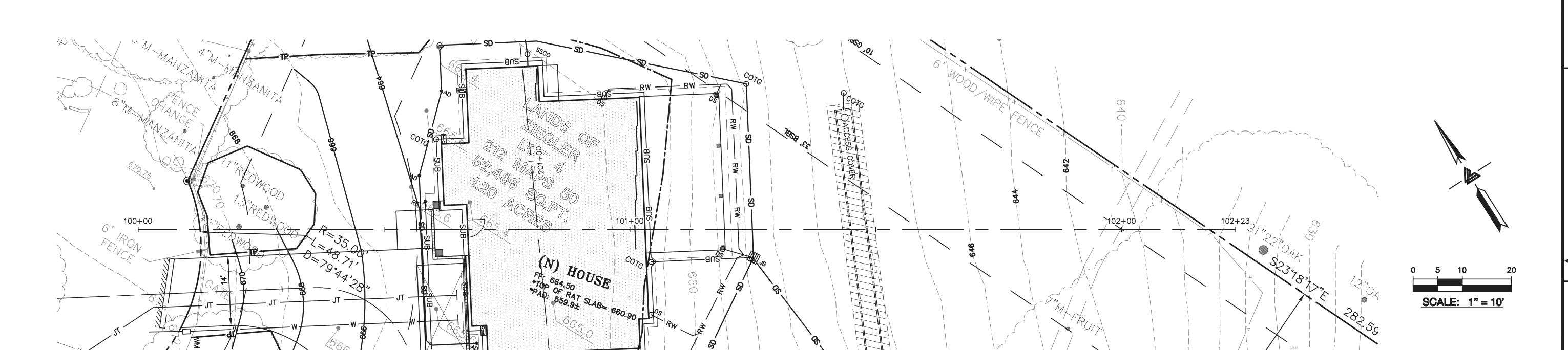
 SCALE:
 AS NOTED

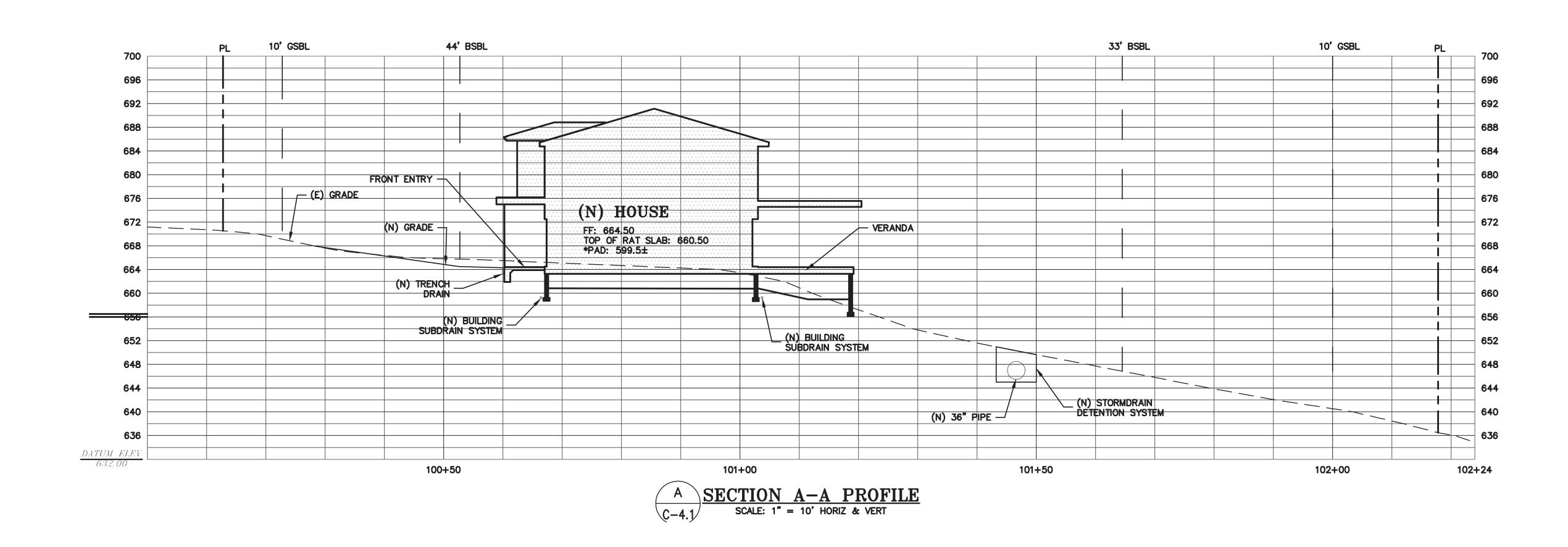
 DESIGN BY:
 TT

CHECKED BY: RB
SHEET NO:

C-4.0

07 OF 07 SHEETS





ZIEGLER RESIDENCE
27474 SUNRISE FARM RD.,
LOS ALTOS HILLS, CALIFORNI
santa clara county

SITE SECTIONS A-A

 JOB NO:
 2201397

 DATE:
 02-19-21

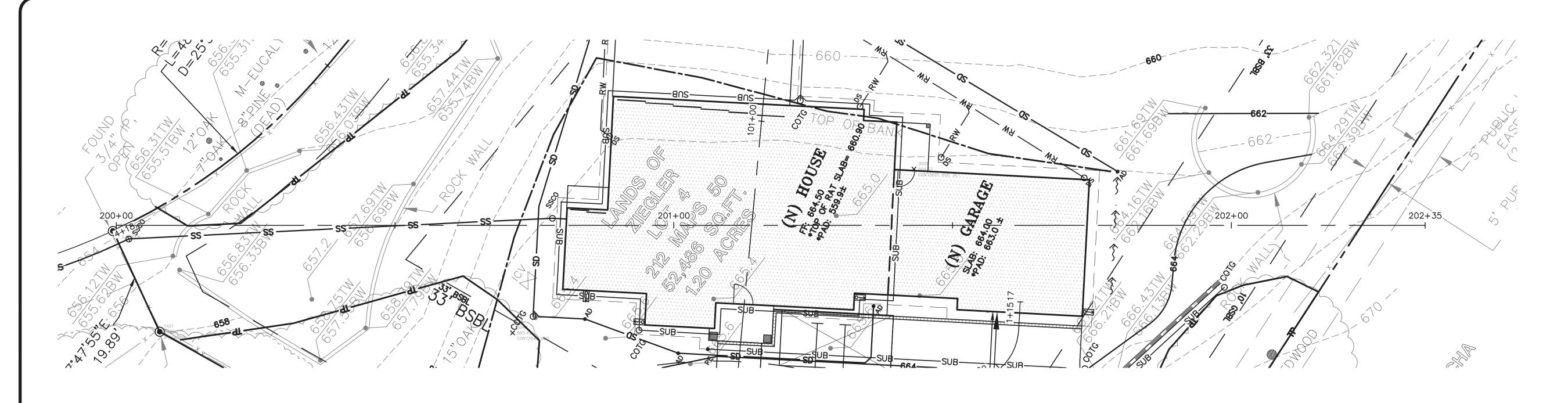
 SCALE:
 AS NOTED

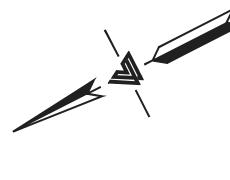
 DESIGN BY:
 TT

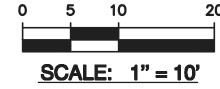
CHECKED BY: RB
SHEET NO:

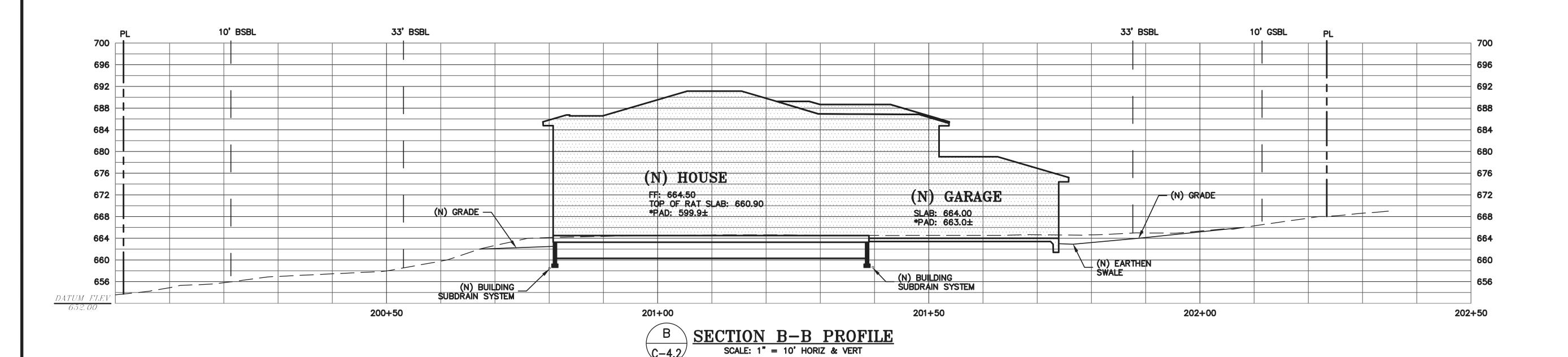
C-4.1

08 OF 07 SHEETS









LEA & BRAZE ENGINEE

CIVIL ENGINEERS · LAND & REGIONAL 2495 INDUSTRIAL PKWY WEST ROSEVILLE HAYWARD, CALIFORNIA 94545 DUBLIN

ZIEGLER RESIDENCE
27474 SUNRISE FARM RD.,
LOS ALTOS HILLS, CALIFORNIA
santa clara county
April 182-11-064

SITE SECTIONS B-I

JOB NO: 2201397

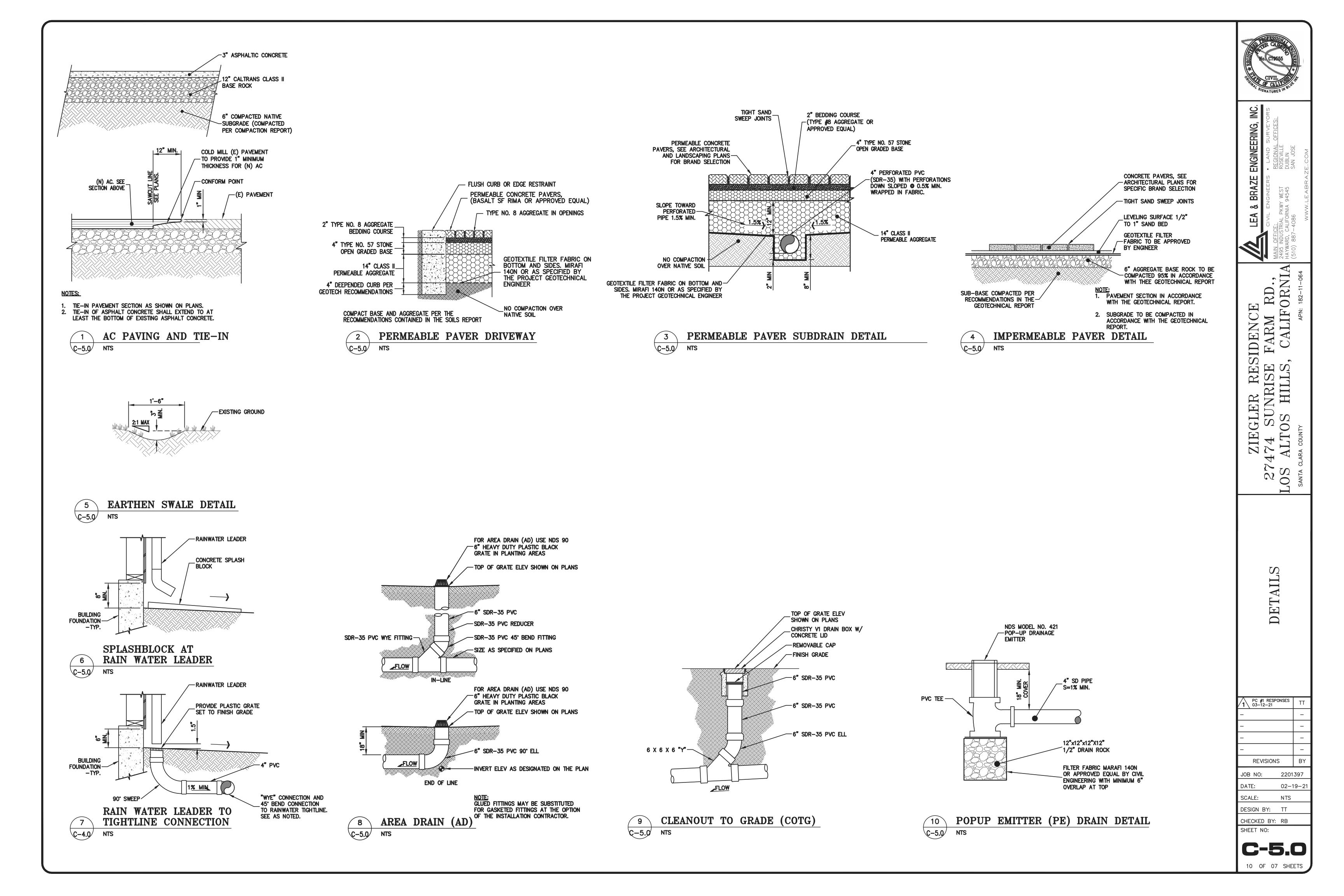
DATE: 02-19-21

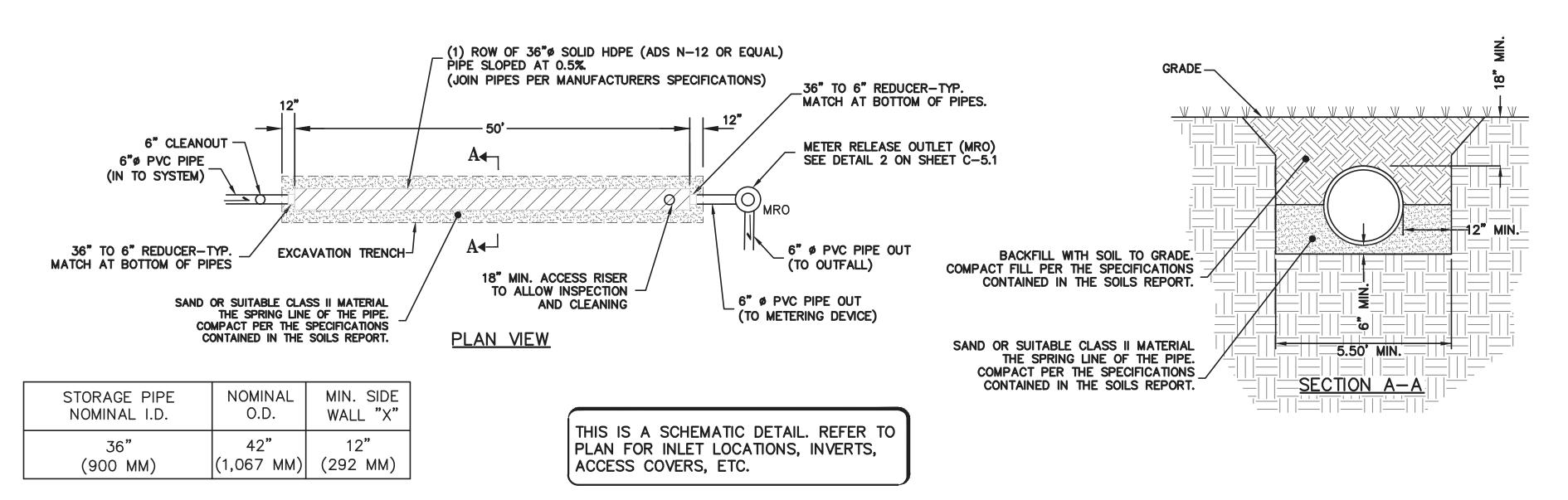
SCALE: AS NOTED

DESIGN BY: TT

CHECKED BY: RB
SHEET NO:

C-4.2
09 OF 07 SHEETS





NOTES:

- 1. ALL REFERENCES TO CLASS I OR II MATERIAL ARE PER ASTM D2321 "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST EDITION.
- 2. ALL RETENTION AND DETENTION SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, LATEST EDITION AND THE MANUFACTURER'S PUBLISHED INSTALLATION GUIDELINES.
- 3. MEASURES SHOULD BE TAKEN TO PREVENT THE MIGRATION OF NATIVE FINES INTO THE BACKFILL MATERIAL, WHEN REQUIRED. SEE ASTM D2321.
- 4. FILTER FABRIC: A GEOTEXTILE FABRIC MAY BE USED AS SPECIFIED BY THE ENGINEER TO PREVENT THE MIGRATION OF FINES FROM THE NATIVE SOIL INTO THE SELECT BACKFILL MATERIAL
- 5. <u>FOUNDATION:</u> WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
- BEDDING: SUITABLE MATERIAL SHALL BE CLASS II*. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 4"-24" (100mm-600mm); 6" (150mm) FOR 30"-60" (750mm-900mm).
- 7. <u>INITIAL BACKFILL:</u> SUITABLE MATERIAL SHALL BE CLASS II* IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
- 8. MINIMUM COVER: MINIMUM COVER OVER ALL RETNETION/DETENTION SYSTEMS IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 18" FROM TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOATATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER IS 18" UP TO 36" DIAMETER PIPE AND 24" OF COVER FOR 42" - 60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.
- * CLASS I BACKFILL REQUIRED AROUND 60" DIAMETER FITTINGS.

TYPICAL RETENTION SYSTEM DETAILS

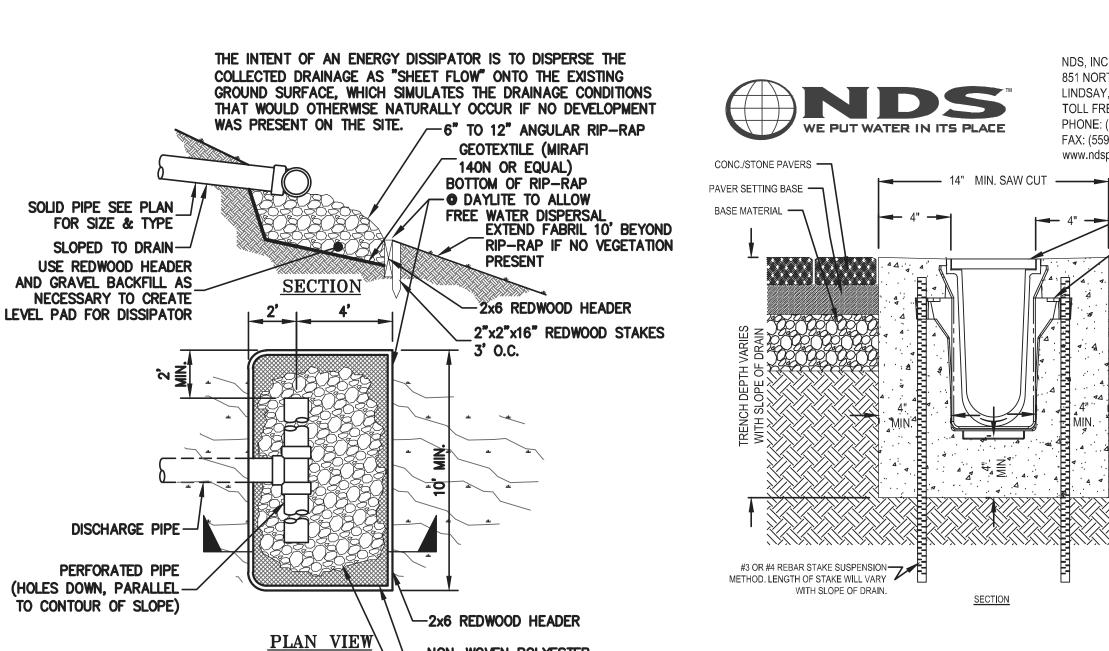
NOTE:
ENDS OF SURFACE DRAINAGE DISCHARGE

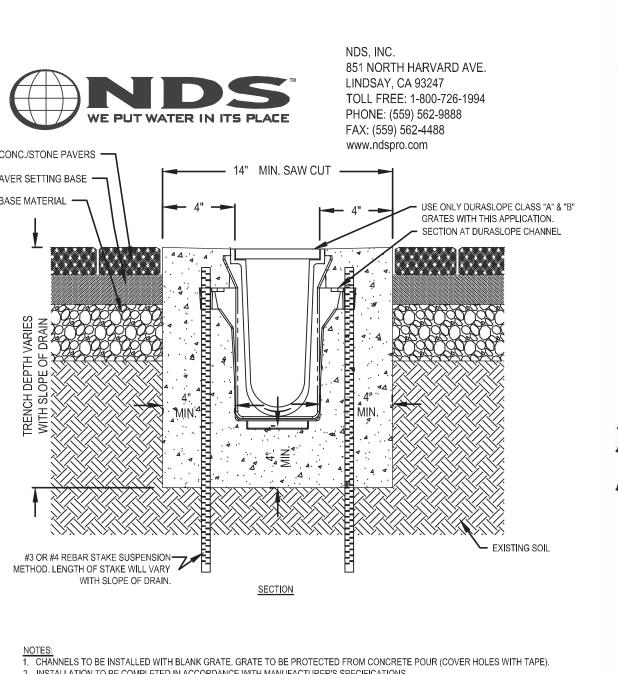
PIPE SHOULD NOT BE CAPPED. PERIODIC

MAINTENANCE IS REQUIRED TO KEEP

DISCHARGE FREE FROM BLOCKAGE.

C-5.1

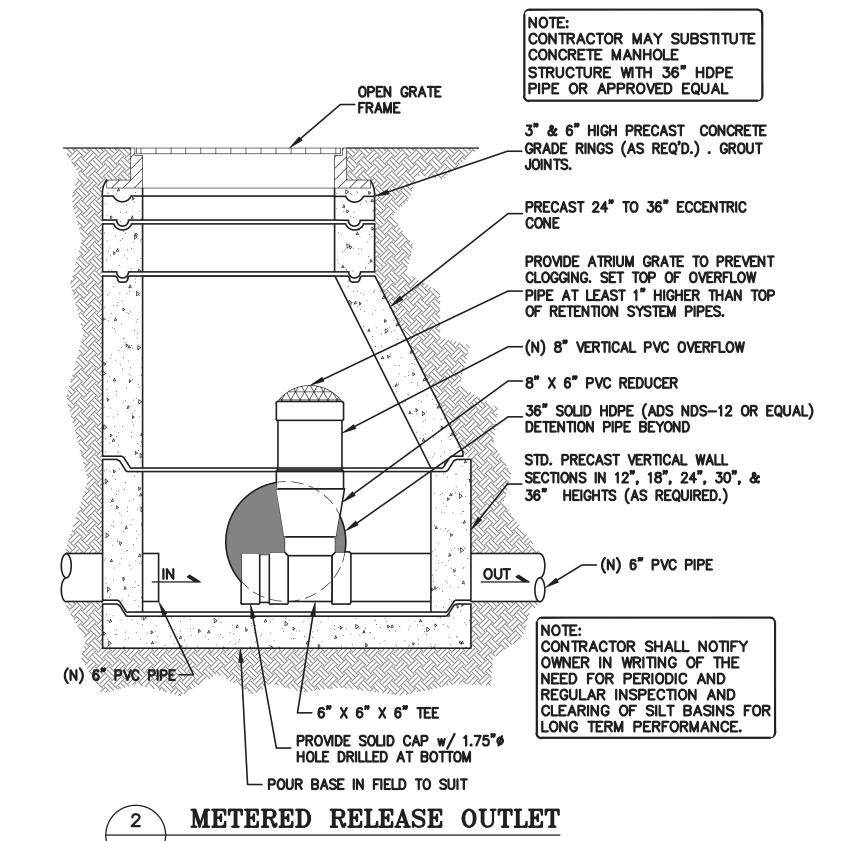


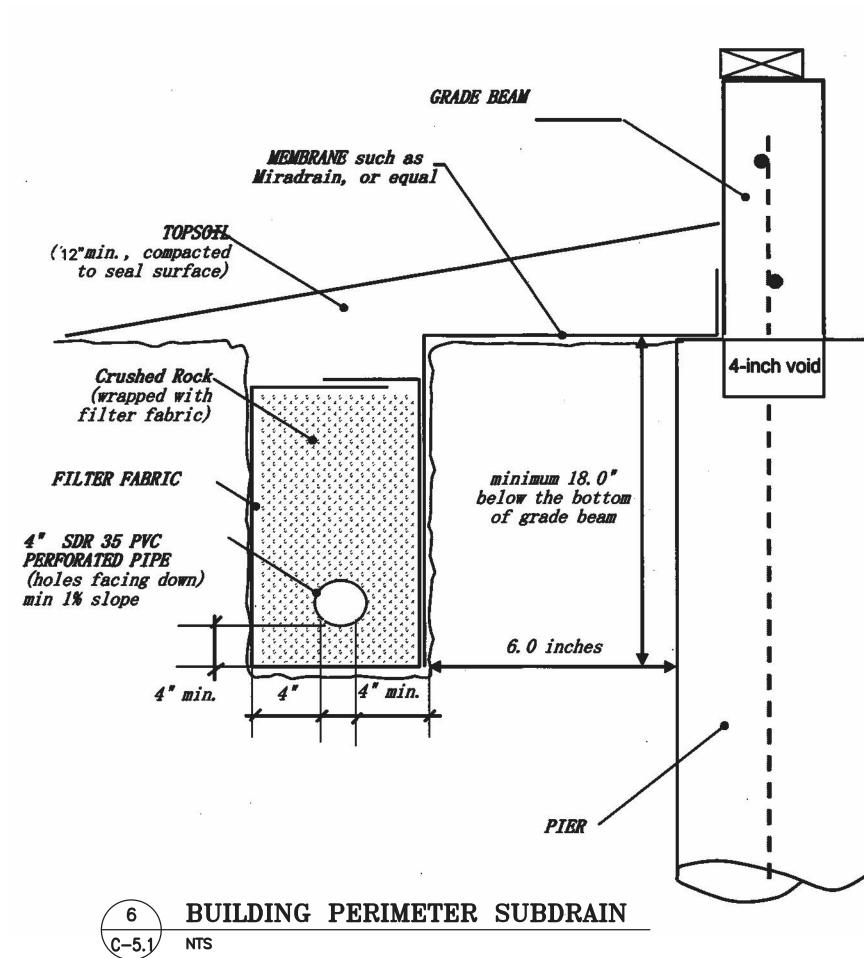


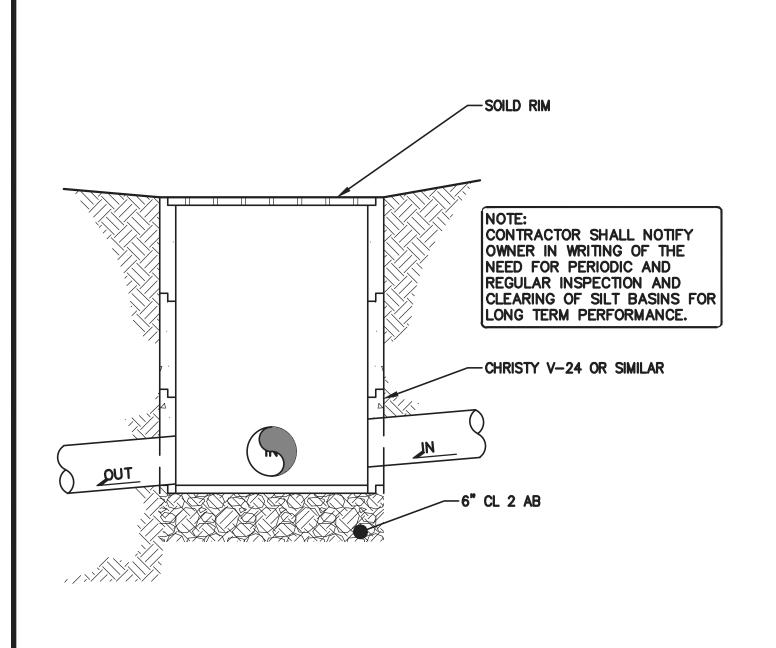
2. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS. 4. THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FOR PLANNING PURPOSES ONLY. 5. ALL INFORMATION CONTAINED HEREIN WAS CURRENT AT THE TIME OF DEVELOPMENT BUT MUST BE REVIEWED AND APPROVED BY THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE.

DURA SLOPE TRENCH DRAIN SYSTEM NTS DURA SLOPE INSTALLATION DETAIL - CLASS 'A' & 'B' 4' ENCASEMENT, REBAR SUSPENSION METHOD W/ PAVERS

REVISION DATE 3-5-2015







JUNCTION BOX (JB) W/ CONCRETE BOTTOM \C-5.1∕

_6" TO 12" ROCK ANGULAR RIP-RAP, NO COBBLES ALLOWED **ENERGY DISSIPATER DISCHARGE**

NON-WOVEN POLYESTER

-GEOTEXTILE (MIRAFI

140N OR EQUAL)

PC #1 RESPONSES 03-12-21 REVISIONS JOB NO: 2201397 DATE: 02-19-2 NTS SCALE: DESIGN BY: TT CHECKED BY: RB SHEET NO:

11 OF 07 SHEETS

RM RD., LIFORNIA

NR. HIII

LTO

27 10S

 \mathbf{F}

SIDENCI FARM S, CALIF

RE

IEG

THESE DRAWINGS AND THEIR CONTENT ARE AND SHALL REMAIN THE PROPERTY OF LEA AND BRAZE ENGINEERING, INC. WHETHER THE PROJECT FOR WHICH THEY ARE PREPARED IS EXECUTED OR NOT. THEY ARE NOT TO BE USED BY ANY PERSONS ON OTHER PROJECTS OR EXTENSIONS OF THE PROJECT EXCEPT BY AGREEMENT IN WRITING AND WITH APPROPRIATE COMPENSATION TO THE ENGINEER.

ALL WORK SHALL COMPLY WITH APPLICABLE CODES AND TRADE STANDARDS WHICH GOVERN EACH PHASE OF WORK INCLUDING, BUT NOT LIMITED TO, CALIFORNIA MECHANICAL CODE, CALIFORNIA PLUMBING CODE, CALIFORNIA ELECTRICAL CODE, CALIFORNIA FIRE CODE, CALTRANS STANDARDS AND SPECIFICATIONS, AND ALL APPLICABLE STATE AND/OR LOCAL CODES AND/OR LEGISLATION.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR AND ALL SUBCONTRACTORS TO CHECK AND VERIFY ALL CONDITIONS, DIMENSIONS, LINES AND LEVELS INDICATED, PROPER FIT AND ATTACHMENT OF ALL PARTS IS REQUIRED. SHOULD THERE BE ANY DISCREPANCIES, IMMEDIATELY NOTIFY THE ENGINEER FOR CORRECTION OR ADJUSTMENT THE EVENT OF FAILURE TO DO SO, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTION OF ANY ERROR.

ALL DIMENSIONS AND CONDITIONS SHALL BE CHECKED AND VERIFIED ON THE JOB BY EACH SUBCONTRACTOR BEFORE HE/SHE BEGINS HIS/HER WORK. ANY ERRORS, OMISSION, OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER/CONTRACTOR BEFORE CONSTRUCTION BEGINS.

COMMENCEMENT OF WORK BY THE CONTRACTOR AND/OR ANY SUBCONTRACTOR SHALL INDICATE KNOWLEDGE AND ACCEPTANCE OF ALL CONDITIONS DESCRIBED IN THESE CONSTRUCTION DOCUMENTS, OR EXISTING ON SITE, WHICH COULD AFFECT THEIR WORK.

WORK SEQUENCE

IN THE EVENT ANY SPECIAL SEQUENCING OF THE WORK IS REQUIRED BY THE OWNER OR THE CONTRACTOR, THE CONTRACTOR SHALL ARRANGE A CONFERENCE BEFORE ANY SUCH WORK IS BEGUN.

SITE EXAMINATION: THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL THOROUGHLY EXAMINE THE SITE AND FAMILIARIZE HIM/HERSELF WITH THE CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED. THE CONTRACTOR SHALL VERIFY AT THE SITE ALL MEASUREMENTS AFFECTING HIS/HER WORK AND SHALL BE RESPONSIBLE FOR THE CORRECTIONS OF THE SAME. NO EXTRA COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR EXPENSES DUE TO HIS/HER NEGLECT TO EXAMINE. OR FAILURE TO DISCOVER, CONDITIONS WHICH AFFECT HIS/HER WORK.

LEA AND BRAZE ENGINEERING, INC. EXPRESSLY RESERVES ITS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THESE PLANS ARE NOT TO BE REPRODUCED, CHANGED OR COPIED IN ANY FORM OR MANNER WHATSOEVER, NOR ARE THEY TO BE ASSIGNED TO A THIRD PARTY WITHOUT FIRST OBTAINING THE WRITTEN PERMISSION AND CONSENT OF LEA AND BRAZE ENGINEERING, INC. IN THE EVENT OF UNAUTHORIZED REUSE OF THESE PLANS BY A THIRD PARTY, THE THIRD PARTY SHALL HOLD HARMLESS LEA AND BRAZE ENGINEERING, INC.

CONSTRUCTION IS ALWAYS LESS THAN PERFECT SINCE PROJECTS REQUIRE THE COORDINATION AND INSTALLATION OF MANY INDIVIDUAL COMPONENTS BY VARIOUS CONSTRUCTION INDUSTRY TRADES. THESE DOCUMENTS CANNOT PORTRAY ALL COMPONENTS OR ASSEMBLIES EXACTLY. IT IS THE INTENTION OF THESE ENGINEERING DOCUMENTS THAT THEY REPRESENT A REASONABLE STANDARD OF CARE IN THEIR CONTENT. IT IS ALSO PRESUMED BY THESE DOCUMENTS THAT CONSTRUCTION REVIEW SERVICES WILL BE PROVIDED BY THE ENGINEER. SHOULD THE OWNER NOT RETAIN THE ENGINEER TO PROVIDE SUCH SERVICES, OR SHOULD HE/SHE RETAIN THE ENGINEER TO PROVIDE ONLY PARTIAL OR LIMITED SERVICES, THEN IT SHALL BE THE OWNER'S AND CONTRACTOR'S RESPONSIBILITY TO FULLY RECOGNIZE AND PROVIDE THAT STANDARD OF CARE.

IF THE OWNER OR CONTRACTOR OBSERVES OR OTHERWISE BECOMES AWARE OF ANY FAULT OR DEFECT IN THE PROJECT OR NONCONFORMANCE WITH THE CONTRACT DOCUMENTS, PROMPT WRITTEN NOTICE THEREOF SHALL BE GIVEN BY THE OWNER AND/OR CONTRACTOR TO THE ENGINEER.

THE ENGINEER SHALL NOT HAVE CONTROL OF OR CHARGE OF AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK, FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS, OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK, OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

SITE PROTECTION

PROTECT ALL LANDSCAPING THAT IS TO REMAIN. ANY DAMAGE OR LOSS RESULTING FROM EXCAVATION. GRADING, OR CONSTRUCTION WORK SHALL BE CORRECTED OR REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OF ALL EXISTING SITE UTILITIES AND SHALL COORDINATE THEIR REMOVAL OR MODIFICATIONS (IF ANY) TO AVOID ANY INTERRUPTION OF SERVICE TO ADJACENT AREAS. THE GENERAL CONTRACTOR SHALL INFORM HIM /HERSELF OF MUNICIPAL REGULATIONS AND CARRY OUT HIS /HER WORK IN COMPLIANCE WITH ALL FEDERAL AND STATE REQUIREMENTS TO REDUCE FIRE HAZARDS AND INJURIES TO THE PUBLIC.

STORMWATER POLLUTION PREVENTION NOTES

- 1) STORE, HANDLE, AND DISPOSE OF CONSTRUCTION MATERIALS AND WASTES PROPERLY, SO AS TO PREVENT THEIR CONTACT WITH STORMWATER.
- 2) CONTROL AND PREVENT THE DISCHARGE OF ALL POTENTIAL POLLUTANTS, INCLUDING SOLID WASTES, PAINTS, CONCRETE, PETROLEUM PRODUCTS, CHEMICALS, WASH WATER OR SEDIMENT, AND NON-STORMWATER DISCHARGES TO STORM DRAINS AND WATER COURSES.
- 3) USE SEDIMENT CONTROL OR FILTRATION TO REMOVE SEDIMENT FROM DEWATERING EFFLUENT.
- 4) AVOID CLEANING, FUELING, OR MAINTAINING VEHICLES ON SITE, EXCEPT IN A DESIGNATED AREA IN WHICH RUNOFF IS CONTAINED AND TREATED.
- 5) DELINEATE CLEARING LIMITS, EASEMENTS, SETBACKS, SENSITIVE OR CRITICAL AREAS, BUFFER ZONES, TREES AND DISCHARGE COURSE WITH FIELD MARKERS.
- 6) PROTECT ADJACENT PROPERTIES AND UNDISTURBED AREAS FROM CONSTRUCTION IMPACTS USING VEGETATIVE

BUFFER STRIPS, SEDIMENT BARRIERS OF FILTERS, DIKES, MULCHING, OR OTHER MEASURES AS APPROPRIATE.

- 7) PERFORM CLEARING AND EARTH MOVING ACTIVITIES DURING DRY WEATHER TO THE MAXIMUM EXTENT
- PRACTICAL.
- 8) LIMIT AND TIME APPLICATIONS OF PESTICIDES AND FERTILIZERS TO PREVENT POLLUTED RUNOFF. 9) LIMIT CONSTRUCTION ACCESS ROUTES AND STABILIZE DESIGNATED ACCESS POINTS.
- 10) AVOID TRACKING DIRT OR MATERIALS OFF-SITE; CLEAN OFF-SITE PAVED AREAS AND SIDEWALKS USING DRY SWEEPING METHODS TO THE MAXIMUM EXTENT PRACTICAL.

SUPPLEMENTAL MEASURES

- A. THE PHRASE "NO DUMPING DRAINS TO BAY" OR EQUALLY EFFECTIVE PHRASE MUST BE LABELED ON STORM DRAIN INLETS (BY STENCILING, BRANDING, OR PLAQUES) TO ALERT THE PUBLIC TO THE DESTINATION OF STORM WATER AND TO PREVENT DIRECT DISCHARGE OF POLLUTANTS INTO THE STORM DRAIN.
- B. USING FILTRATION MATERIALS ON STORM DRAIN COVERS TO REMOVE SEDIMENT FROM DEWATERING EFFLUENT.
- C. STABILIZING ALL DENUDED AREAS AND MAINTAINING EROSION CONTROL MEASURES CONTINUOUSLY FROM OCTOBER 15 AND APRIL 15.
- D. REMOVING SPOILS PROMPTLY, AND AVOID STOCKPILING OF FILL MATERIALS, WHEN RAIN IS FORECAST. IF RAIN THREATENS, STOCKPILED SOILS AND OTHER MATERIALS SHALL BE COVERED WITH A TARP OR OTHER WATERPROOF MATERIAL.
- E. STORING, HANDLING, AND DISPOSING OF CONSTRUCTION MATERIALS AND WASTES SO AS TO AVOID THEIR ENTRY TO THE STORM DRAIN SYSTEMS OR WATER BODY.
- F. AVOIDING CLEANING, FUELING, OR MAINTAINING VEHICLES ON—SITE, EXCEPT IN AN AREA DESIGNATED TO CONTAIN AND TREAT RUNOFF.

GRADING & DRAINAGE NOTES:

1. SCOPE OF WORK

these specifications and applicable plans pertain to and include all site grading and EARTHWORK ASSOCIATED WITH THE PROJECT INCLUDING, BUT NOT LIMITED TO THE FURNISHING OF ALL LABOR, TOOLS AND EQUIPMENT NECESSARY FOR SITE CLEARING AND GRUBBING, SITE PREPARATION, DISPOSAL OF EXCESS OR UNSUITABLE MATERIAL. STRIPPING, KEYING, EXCAVATION, OVER EXCAVATION RECOMPACTION PREPARATION FOR SOIL RECEIVING FILL, PAVEMENT, FOUNDATION OF SLABS, EXCAVATION, IMPORTATION OF ANY REQUIRED FILL MATERIAL, PROCESSING, PLACEMENT AND COMPACTION OF FILL AND SUBSIDIARY WORK NECESSARY TO COMPLETE THE GRADING TO CONFORM TO THE LINES, GRADING AND SLOPE SHOWN ON THE PROJECT GRADING PLANS.

2. GENERAL

- A. ALL SITE GRADING AND EARTHWORK SHALL CONFORM TO THE RECOMMENDATIONS OF THESE SPECIFICATIONS, THE SOILS REPORT BY ROMIG ENGINEERS, DATED SEPTEMBER 18, 2020; AND THE TOWN OF LOS ALTOS HILLS.
- B. ALL FILL MATERIALS SHALL BE DENSIFIED SO AS TO PRODUCE A DENSITY NOT LESS THAN 90% RELATIVE COMPACTION BASED UPON ASTM TEST DESIGNATION D1557. FIELD DENSITY TEST WILL BE PERFORMED IN ACCORDANCE WITH ASTM TEST DESIGNATION 2922 AND 3017. THE LOCATION AND FREQUENCY OF THE FIELD DENSITY TEST WILL BE AS DETERMINED BY THE SOIL ENGINEER. THE RESULTS OF THESE TEST AND COMPLIANCE WITH THE SPECIFICATIONS WILL BE THE BASIS UPON WHICH SATISFACTORY COMPLETION OF THE WORK WILL BE JUDGED BY THE SOIL ENGINEER. ALL CUT AND FILL SLOPES SHALL BE CONSTRUCTED AS SHOWN ON PLANS, BUT NO STEEPER THAN TWO (2) HORIZONTAL TO ONE (1) VERTICAL.
- C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SATISFACTORY COMPLETION OF ALL THE EARTHWORK IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS. NO DEVIATION FROM THESE SPECIFICATIONS SHALL BE MADE EXCEPT UPON WRITTEN APPROVAL BY THE SOILS ENGINEER. BOTH CUT AND FILL AREAS SHALL BE SURFACE COMPLETED TO THE SATISFACTION OF THE SOILS ENGINEER AT THE CONCLUSION OF ALL GRADING OPERATIONS AND PRIOR TO FINAL ACCEPTANCE. THE CONTRACTOR SHALL NOTIFY THE SOILS ENGINEER AT LEAST TWO (2) WORKING DAYS PRIOR TO DOING ANY SITE GRADING AND EARTHWORK INCLUDING CLEARING.

CLEARING AND GRUBBING

- A. THE CONTRACTOR SHALL ACCEPT THE SITE IN ITS PRESENT CONDITION. ALL EXISTING PUBLIC IMPROVEMENTS SHALL BE PROTECTED. ANY IMPROVEMENTS DAMAGED SHALL BE REPLACED BY THE CONTRACTOR AS DIRECTED BY THE LOCAL JURISDICTION WITH NO EXTRA COMPENSATION.
- B. ALL ABANDONED BUILDINGS AND FOUNDATIONS, TREE (EXCEPT THOSE SPECIFIED TO REMAIN FOR LANDSCAPING PURPOSES), FENCES, VEGETATION AND ANY SURFACE DEBRIS SHALL BE REMOVED AND DISPOSED OF OFF THE SITE BY THE CONTRACTOR.
- C. ALL ABANDONED SEPTIC TANKS AND ANY OTHER SUBSURFACE STRUCTURES EXISTING IN PROPOSED DEVELOPMENT AREAS SHALL BE REMOVED PRIOR TO ANY GRADING OR FILL OPERATION. ALL APPURTENANT DRAIN FIELDS AND OTHER CONNECTING LINES MUST ALSO BE TOTALLY REMOVED.
- D. ALL ABANDONED UNDERGROUND IRRIGATION OR UTILITY LINES SHALL BE REMOVED OR DEMOLISHED. THE APPROPRIATE FINAL DISPOSITION OF SUCH LINES DEPEND UPON THEIR DEPTH AND LOCATION AND THE METHOD OF REMOVAL OR DEMOLITION SHALL BE DETERMINED BY THE SOILS ENGINEER. ONE OF THE FOLLOWING METHODS WILL BE USED:
 - (1) EXCAVATE AND TOTALLY REMOVE THE UTILITY LINE FROM THE TRENCH.
 - (2) EXCAVATE AND CRUSH THE UTILITY LINE IN THE TRENCH.
 - (3) CAP THE ENDS OF THE UTILITY LINE WITH CONCRETE TO PREVENT THE ENTRANCE OF WATER. THE LOCATIONS AT WHICH THE UTILITY LINE WILL BE CAPPED WILL BE DETERMINED BY THE UTILITY DISTRICT ENGINEER. THE LENGTH OF THE CAP SHALL NOT BE LESS THAN FIVE FEET, AND THE CONCRETED MIX EMPLOYED SHALL HAVE MINIMUM SHRINKAGE.

4. SITE PREPARATION AND STRIPPING

- A. ALL SURFACE ORGANICS SHALL BE STRIPPED AND REMOVED FROM BUILDING PADS, AREAS TO RECEIVE COMPACTED FILL AND PAVEMENT AREAS.
- B. UPON THE COMPLETION OF THE ORGANIC STRIPPING OPERATION. THE GROUND SURFACE (NATIVE SOIL SUBGRADE) OVER THE ENTIRE AREA OF ALL BUILDING PADS, STREET AND PAVEMENT AREAS AND ALL AREAS TO RECEIVE COMPACTED FILL SHALL BE PLOWED OR SCARIFIED UNTIL THE SURFACE IS FREE (RUTS, HUMMOCKS OR OTHER UNEVEN FEATURES WHICH MAY INHIBIT UNIFORM SOIL COMPACTION. THE GROUND SURFACE SHALL THEN BE DISCED OR BLADED TO A DEPTH OF AT LEAST 6 INCHES. UPON ENGINEER'S SATISFACTION, THE NEW SURFACE SHALL BE WATER CONDITIONED AND RECOMPACTED PER REQUIREMENTS FOR COMPACTING FILL MATERIAL.

EXCAVATION

- A. UPON COMPLETION OF THE CLEARING AND GRUBBING, SITE PREPARATION AND STRIPPING, THE CONTRACTOR SHALL MAKE EXCAVATIONS TO LINES AND GRADES NOTED ON THE PLAN. WHERE REQUIRED BY THE SOILS ENGINEER, UNACCEPTABLE NATIVE SOILS OR UNENGINEERED FILL SHALL BE OVER EXCAVATED BELOW THE DESIGN GRADE. SEE PROJECT SOILS REPORT FOR DISCUSSION OF OVER EXCAVATION OF THE UNACCEPTABLE MATERIAL, RESULTING GROUND LINE SHALL BE SCARIFIED. MOISTURE-CONDITIONED AND RECOMPACTED AS SPECIFIED IN SECTION 4 OF THESE SPECIFICATIONS. COMPACTED FILL MATERIAL SHALL BE PLACED TO BRING GROUND LEVEL BACK TO DESIGN GRADE.
- B. EXCAVATED MATERIALS SUITABLE FOR COMPACTED FILL MATERIAL SHALL BE UTILIZED IN MAKING THE REQUIRED COMPACTED FILLS. THOSE NATIVE MATERIALS CONSIDERED UNSUITABLE BY THE SOILS ENGINEER SHALL BE DISPOSED OF OFF THE SITE BY THE CONTRACTOR.

PLACING. SPREADING AND COMPACTING FILL MATERIAL

THE MATERIALS PROPOSED FOR USE AS COMPACTED FILL SHALL BE APPROVED BY THE SOILS ENGINEER BEFORE COMMENCEMENT OF GRADING OPERATIONS. THE NATIVE MATERIAL IS CONSIDERED SUITABLE FOR FILL: HOWEVER, ANY NATIVE MATERIAL DESIGNATED UNSUITABLE BY THE SOILS ENGINEER SHALL BE removed from the site by the contractor. Any imported material shall be approved for use by the soils engineer, in writing, before being imported to the site and shall possess SUFFICIENT FINES TO PROVIDE A COMPETENT SOIL MATRIX AND SHALL BE FREE OF VEGETATIVE AND ORGANIC MATTER AND OTHER DELETERIOUS MATERIALS. ALL FILL VOIDS SHALL BE FILLED AND PROPERLY COMPACTED. NO ROCKS LARGER THAN THREE INCHES IN DIAMETER SHALL BE PERMITTED.

B. FILL CONSTRUCTION

THE SOILS ENGINEER SHALL APPROVE THE NATIVE SOIL SUBGRADE BEFORE PLACEMENT OF ANY COMPACTED FILL MATERIAL. UNACCEPTABLE NATIVE SOIL SHALL BE REMOVED AS DIRECTED BY THE SOILS ENGINEER. THE RESULTING GROUND LINE SHALL BE SCARIFIED MOISTURE CONDITIONED AND recompacted as specified in section 4 of these specifications. Compacted fill material SHALL BE PLACED TO BRING GROUND LEVEL BACK TO DESIGN GRADE. GROUND PREPARATION SHALL BE FOLLOWED CLOSELY BY FILL PLACEMENT TO PREVENT DRYING OUT OF THE SUBSOIL BEFORE PLACEMENT of the fill.

THE APPROVED FILL MATERIALS SHALL BE PLACED IN UNIFORM HORIZONTAL LAYERS NO THICKER THAN 8" IN LOOSE THICKNESS, LAYERS SHALL BE SPREAD EVENLY AND SHALL BE THOROUGHLY BLADE MIXED DURING THE SPREADING TO ENSURE UNIFORMITY OF MATERIAL IN EACH LAYER. THE SCARIFIED SUBGRADE AND FILL MATERIAL SHALL BE MOISTURE CONDITIONED TO AT LEAST OPTIMUM MOISTURE. WHEN THE MOISTURE CONTENT OF THE FILL IS BELOW THAT SPECIFIED. WATER SHALL BE ADDED UNTIL THE MOISTURE DURING THE COMPACTION PROCESS. WHEN THE MOISTURE CONTENT OF THE FILL IS ABOVE THAT SPECIFIED, THE FILL MATERIAL SHALL BE AERATED BY BLADING OR OTHER SATISFACTOR'S METHODS UNTIL THE MOISTURE CONTENT IS AS SPECIFIED.

AFTER EACH LAYER HAS BEEN PLACED, MIXED, SPREAD EVENLY AND MOISTURE CONDITIONED, IT SHALL BE COMPACTED TO AT LEAST THE SPECIFIED DENSITY.

THE FILL OPERATION SHALL BE CONTINUED IN COMPACTED LAYERS AS SPECIFIED ABOVE UNTIL THE FILL HAS BEEN BROUGHT TO THE FINISHED SLOPES AND GRADES AS SHOWN ON THE PLANS. NO LAYER SHALL BE ALLOWED TO DRY OUT BEFORE SUBSEQUENT LAYERS ARE PLACED.

COMPACTION EQUIPMENT SHALL BE OF SUCH DESIGN THAT IT WILL BE ABLE TO COMPACT THE FILL TO THE SPECIFIED MINIMUM COMPACTION WITHIN THE SPECIFIED MOISTURE CONTENT RANGE. COMPACTION OF EACH LAYER SHALL BE CONTINUOUS OVER ITS ENTIRE AREA UNTIL THE REQUIRED MINIMUM DENSITY HAS BEEN OBTAINED.

CUT OR FILL SLOPES

all constructed slopes, both cut and fill, shall be no steeper than 2 to 1 (horizontal TO VERTICAL). DURING THE GRADING OPERATION, COMPACTED FILL SLOPES SHALL BE OVERFILLED BY AT LEAST ONE FOOT HORIZONTALLY AT THE COMPLETION OF THE GRADING OPERATIONS, THE EXCESS FILL EXISTING ON THE SLOPES SHALL BE BLADED OFF TO CREATE THE FINISHED SLOPE EMBANKMENT. ALL CUT AND FILL SLOPES SHALL BE TRACK WALKED AFTER BEING BROUGHT TO FINISH GRADE AND THEN BE PLANTED WITH EROSION CONTROL SLOPE PLANTING. THE SOILS ENGINEER SHALL REVIEW ALL CUT SLOPES TO DETERMINE IF ANY ADVERSE GEOLOGIC CONDITIONS ARE EXPOSED. IF SUCH CONDITIONS DO OCCUR, THE SOILS ENGINEER SHALL RECOMMEND THE APPROPRIATE MITIGATION MEASURES AT THE TIME OF THEIR DETECTION.

8. <u>SEASONAL LIMITS AND DRAINAGE CONTROL</u>

FILL MATERIALS SHALL NOT BE PLACED, SPREAD OR COMPACTED WHILE IT IS AT AN UNSUITABLY HIGH MOISTURE CONTENT OR DURING OTHERWISE UNFAVORABLE CONDITIONS. WHEN THE WORK IS Interrupted for any reason the fill operations shall not be resumed until field test PERFORMED BY THE SOILS ENGINEER INDICATE THAT THE MOISTURE CONDITIONS IN AREAS TO BE FILLED ARE AS PREVIOUSLY SPECIFIED. ALL EARTH MOVING AND WORKING OPERATIONS SHALL BE CONTROLLED TO PREVENT WATER FROM RUNNING INTO EXCAVATED AREAS. ALL EXCESS WATER SHALL BE PROMPTLY REMOVED AND THE SITE KEPT DRY.

DUST CONTROL

THE CONTRACTOR SHALL TAKE ALL STEPS NECESSARY FOR THE ALLEVIATION OR PREVENTION OF ANY DUST NUISANCE ON OR ABOUT THE SITE CAUSED BY THE CONTRACTOR'S OPERATION EITHER DURING THE PERFORMANCE OF THE GRADING OR RESULTING FROM THE CONDITION IN WHICH THE CONTRACTOR LEAVES THE SITE. THE CONTRACTOR SHALL ASSUME ALL LIABILITY INCLUDING COURT COST OF CO-DEFENDANTS FOR ALL CLAIMS RELATED TO DUST OR WIND-BLOWN MATERIALS ATTRIBUTABLE TO HIS WORK. COST FOR THIS ITEM OF WORK IS TO BE INCLUDED IN THE EXCAVATION ITEM AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.

10. <u>INDEMNITY</u>

THE CONTRACTOR WILL HOLD HARMLESS. INDEMNIFY AND DEFEND THE ENGINEER. THE OWNER AND HIS CONSULTANTS AND EACH OF THEIR OFFICERS AND EMPLOYEES AND AGENTS, FROM ANY AND ALL LIABILITY CLAIMS, LOSSES OR DAMAGE ARISING OR ALLEGED TO HEREIN, BUT NOT INCLUDING THE SOLE NEGLIGENCE OF THE OWNER. THE ARCHITECT, THE ENGINEER AND HIS CONSULTANTS AND EACH OF THEIR OFFICERS AND EMPLOYEES AND AGENTS.

11. <u>SAFETY</u>

IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES. THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE. INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK, THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.

THE DUTY OF THE ENGINEERS TO CONDUCT CONSTRUCTION REVIEW OF THE CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES, IN, ON OR NEAR THE CONSTRUCTION SITE.

12. GUARANTEE

ieither the final payment, nor the provisions in the contract, nor partial, nor entire use OR OCCUPANCY OF THE PREMISES BY THE OWNER SHALL CONSTITUTE AN ACCEPTANCE OF THE WORK NOT DONE IN ACCORDANCE WITH THE CONTRACT OR RELIEVES THE CONTRACTOR OF LIABILITY IN RESPECT TO ANY EXPRESS WARRANTIES OR RESPONSIBILITY FOR FAULTY MATERIAL OR WORKMANSHIP.

THE CONTRACTOR SHALL REMEDY ANY DEFECTS IN WORK AND PAY FOR ANY DAMAGE TO OTHER WORK resulting there from which shall appear within a period of one (1) calendar year from THE DATE OF FINAL ACCEPTANCE OF THE WORK.

TRENCH BACKFILL

either the on—site inorganic soil or approved imported soil may be used as trench BACKFILL. THE BACKFILL MATERIAL SHALL BE MOISTURE CONDITIONED PER THESE SPECIFICATIONS AND SHALL BE PLACED IN LIFTS OF NOT MORE THAN SIX INCHES IN HORIZONTAL UNCOMPACTED LAYERS and be compacted by Mechanical Means to a minimum of 90% relative compaction. Imported SAND MAY BE USED FOR TRENCH BACKFILL MATERIAL PROVIDED IT IS COMPACTED TO AT LEAST 90% relative compaction. Water jetting associated with compaction using vibratory equipment WILL BE PERMITTED ONLY WITH IMPORTED SAND BACKFILL WITH THE APPROVAL OF THE SOILS ENGINEER. ALL PIPES SHALL BE BEDDED WITH SAND EXTENDING FROM THE TRENCH BOTTOM TO TWELVE INCHES ABOVE THE PIPE. SAND BEDDING IS TO BE COMPACTED AS SPECIFIED ABOVE FOR SAND BACKFILL.

EROSION CONTROL

- A. ALL GRADING, EROSION AND SEDIMENT CONTROL AND RELATED WORK UNDERTAKEN ON THIS SITE IS SUBJECT TO ALL TERMS AND CONDITIONS OF THE COUNTY GRADING ORDINANCE AND MADE A PART HEREOF BY REFERENCE.
- B. THE CONTRACTOR WILL BE LIABLE FOR ANY AND ALL DAMAGES TO ANY PUBLICLY OWNED AND MAINTAINED ROAD CAUSED BY THE AFORESAID CONTRACTOR'S GRADING ACTIVITIES, AND SHALL BE RESPONSIBLE FOR THE CLEANUP OF ANY MATERIAL SPILLED ON ANY PUBLIC ROAD ON THE HAUL ROUTE.
- C. THE EROSION CONTROL MEASURES ARE TO BE OPERABLE DURING THE RAINY SEASON, GENERALLY FROM OCTOBER FIRST TO APRIL FIFTEENTH. EROSION CONTROL PLANTING IS TO BE COMPLETED BY OCTOBER FIRST. NO GRADING OR UTILITY TRENCHING SHALL OCCUR BETWEEN OCTOBER FIRST AND APRIL FIFTEENTH UNLESS AUTHORIZED BY THE LOCAL JURISDICTION.
- D. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL DISTURBED AREAS ARE STABILIZED AND CHANGES TO THIS EROSION AND SEDIMENT CONTROL PLAN SHALL BE MADE TO MEET FIELD CONDITIONS ONLY WITH THE APPROVAL OF OR AT THE DIRECTION OF THE SOILS ENGINEER.
- E. DURING THE RAINY SEASON, ALL PAVED AREAS SHALL BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE SHALL BE MAINTAINED SO AS TO MINIMIZE SEDIMENT-LADEN RUNOFF TO ANY STORM DRAINAGE SYSTEM.
- F. ALL EROSION CONTROL FACILITIES MUST BE INSPECTED AND REPAIRED AT THE END OF EACH WORKING DAY DURING THE RAINY SEASON.
- G. WHEN NO LONGER NECESSARY AND PRIOR TO FINAL ACCEPTANCE OF DEVELOPMENT. SEDIMENT BASINS SHALL BE REMOVED OR OTHERWISE DEACTIVATED AS REQUIRED BY THE LOCAL JURISDICTION.
- H. A CONSTRUCTION ENTRANCE SHALL BE PROVIDED AT ANY POINT OF EGRESS FROM THE SITE TO ROADWAY. A CONSTRUCTION ENTRANCE SHOULD BE COMPOSED OF COARSE DRAIN ROCK (2" TO 3") MINIMUM DIAMETER) AT LEAST EIGHT INCHES THICK BY FIFTY (50) FEET LONG BY TWENTY (20) FEET WIDE UNLESS SHOWN OTHERWISE ON PLAN AND SHALL BE MAINTAINED UNTIL THE SITE IS PAVED.
- I. ALL AREAS SPECIFIED FOR HYDROSEEDING SHALL BE NOZZLE PLANTED WITH STABILIZATION MATERIAL CONSISTING OF FIBER, SEED, FERTILIZER AND WATER, MIXED AND APPLIED IN THE FOLLOWING

FIBER, 2000 LBS/ACRE SEED, 200 LBS/ACRE (SEE NOTE J, BELOW) FERTILIZER (11-8-4), 500 LBS/ACRE WATER, AS REQUIRED FOR APPLICATION

J. SEED MIX SHALL BE PER CALTRANS STANDARDS.

- K. WATER UTILIZED IN THE STABILIZATION MATERIAL SHALL BE OF SUCH QUALITY THAT IT WILL PROMOTE GERMINATION AND STIMULATE GROWTH OF PLANTS. IT SHALL BE FREE OF POLLUTANT MATERIALS AND
- L. HYDROSEEDING SHALL CONFORM TO THE PROVISIONS OF SECTION 20, EROSION CONTROL AND HIGHWAY PLANTING", OF THE STANDARD SPECIFICATIONS OF THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION, AS LAST REVISED.
- M. A DISPERSING AGENT MAY BE ADDED TO THE HYDROSEEDING MATERIAL. PROVIDED THAT THE CONTRACTOR FURNISHES SUITABLE EVIDENCE THAT THE ADDITIVE WILL NOT ADVERSELY AFFECT THE PERFORMANCE OF THE SEEDING MIXTURE.
- N. STABILIZATION MATERIALS SHALL BE APPLIED AS SOON AS PRACTICABLE AFTER COMPLETION OF GRADING OPERATIONS AND PRIOR TO THE ONSET OF WINTER RAINS, OR AT SUCH OTHER TIME AS DIRECTED BY THE COUNTY ENGINEER. THE MATERIAL SHALL BE APPLIED BEFORE INSTALLATION OF OTHER LANDSCAPING MATERIALS SUCH AS TREES, SHRUBS AND GROUND COVERS.
- O. THE STABILIZATION MATERIAL SHALL BE APPLIED WITHIN 4-HOURS AFTER MIXING. MIXED MATERIAL NOT USED WITHIN 4-HOURS SHALL BE REMOVED FROM THE SITE.
- P. THE CONTRACTOR SHALL MAINTAIN THE SOIL STABILIZATION MATERIAL AFTER PLACEMENT. THE COUNTY ENGINEER MAY REQUIRE SPRAY APPLICATION OF WATER OR OTHER MAINTENANCE ACTIVITIES TO ASSURE THE EFFECTIVENESS OF THE STABILIZATION PROCESS. APPLICATION OF WATER SHALL BE ACCOMPLISHED USING NOZZLES THAT PRODUCE A SPRAY THAT DOES NOT CONCENTRATE OR WASH AWAY THE STABILIZATION MATERIALS.

15. CLEANUP

THE CONTRACTOR MUST MAINTAIN THE SITE CLEAN, SAFE AND IN USABLE CONDITION. ANY SPILLS OF SOIL. ROCK OR CONSTRUCTION MATERIAL MUST BE REMOVED FROM THE SITE BY THE CONTRACTOR DURING CONSTRUCTION AND UPON COMPLETION OF THE PROJECT. COST FOR THIS ITEM OF WORK SHALL BE INCLUDED IN THE EXCAVATION AND COMPACTION ITEM AND NO ADDITIONAL COMPENSATION SHALL

> NOTE:
> THESE NOTES ARE INTENDED TO BE USED AS A GENERAL GUIDELINE. THE REFERENCED SOILS REPORT FOR THE PROJECT AND GOVERNING AGENCY GRADING ORDINANCE SHALL SUPERSEDE THESE NOTES. THE SOILS ENGINEER MAY MAKE ON-SITE RECOMMENDATIONS DURING GRADING OPERATIONS.



0

12 OF 07 SHEETS

CHECKED BY: RB

PURPOSE:

THE PURPOSE OF THIS PLAN IS TO STABILIZE THE SITE TO PREVENT EROSION OF GRADED AREAS AND TO PREVENT SEDIMENTATION FROM LEAVING THE CONSTRUCTION AREA AND AFFECTING NEIGHBORING SITES. NATURAL AREAS. PUBLIC FACILITIES OR ANY OTHER AREA THAT MIGHT BE AFFECTED BY SEDIMENTATION. ALL MEASURES SHOWN ON THIS PLAN SHOULD BE CONSIDERED THE MINIMUM REQUIREMENTS NECESSARY. SHOULD FIELD CONDITIONS DICTATE ADDITIONAL MEASURES, SUCH MEASURES SHALL BE PER CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD'S FIELD MANUAL FOR EROSION AND SEDIMENTATION CONTROL AND THE CALIFORNIA STORM WATER QUALITY ASSOCIATION BEST MANAGEMENT PRACTICES HANDBOOK FOR CONSTRUCTION. LEA & BRAZE ENGINEERING SHOULD BE NOTIFIED IMMEDIATELY SHOULD CONDITIONS CHANGE.

EROSION CONTROL NOTES:

- 1. IT SHALL BE THE OWNER'S/CONTRACTOR'S RESPONSIBILITY TO MAINTAIN CONTROL OF THE ENTIRE CONSTRUCTION OPERATION AND TO KEEP THE ENTIRE SITE IN COMPLIANCE WITH THIS EROSION CONTROL PLAN.
- 2. THE INTENTION OF THIS PLAN IS FOR INTERIM EROSION AND SEDIMENT CONTROL ONLY. ALL EROSION CONTROL MEASURES SHALL CONFORM TO CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD'S FIELD MANUAL FOR EROSION AND SEDIMENTATION CONTROL, THE CALIFORNIA STORM WATER QUALITY ASSOCIATION BEST MANAGEMENT PRACTICES HANDBOOK FOR CONSTRUCTION, AND THE LOCAL GOVERNING AGENCY FOR THIS
- 3. OWNER/CONTRACTOR SHALL BE RESPONSIBLE FOR MONITORING EROSION AND SÉDIMENT CONTROL MEASURES PRIOR TO, DURING, AND AFTER STORM EVENTS. PERSON IN CHARGE OF MAINTAINING EROSION CONTROL MEASURES SHOULD WATCH LOCAL WEATHER REPORTS AND ACT APPROPRIATELY TO MAKE SURE ALL NECESSARY MEASURES ARE IN PLACE.
- 4. SANITARY FACILITIES SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
- 5. DURING THE RAINY SEASON, ALL PAVED AREAS SHALL BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE SHALL BE MAINTAINED SO AS TO MINIMIZE SEDIMENT-LADEN RUNOFF TO ANY STORM DRAINAGE SYSTEM. INCLUDING EXISTING DRAINAGE SWALES AND WATERCOURSES.
- 6. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION WILL BE MINIMIZED. COMPLIANCE WITH FEDERAL, STATE AND LOCAL LAWS CONCERNING POLLUTION SHALL BE MAINTAINED AT ALL TIMES.
- 7. CONTRACTOR SHALL PROVIDE DUST CONTROL AS REQUIRED BY THE APPROPRIATE FEDERAL, STATE AND LOCAL AGENCY REQUIREMENTS.
- 8. ALL MATERIALS NECESSARY FOR THE APPROVED EROSION CONTROL MEASURES SHALL BE IN PLACE BY OCTOBER 15TH.
- 9. EROSION CONTROL SYSTEMS SHALL BE INSTALLED AND MAINTAINED THROUGHOUT THE RAINY SEASON, OR FROM OCTOBER 15TH THROUGH APRIL 15TH, WHICHEVER IS LONGER.
- 10. IN THE EVENT OF RAIN, ALL GRADING WORK IS TO CEASE IMMEDIATELY AND THE SITE IS TO BE SEALED IN ACCORDANCE WITH THE APPROVAL EROSION CONTROL MEASURES AND APPROVED EROSION CONTROL PLAN.
- 11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING AND REPAIRING EROSION CONTROL SYSTEMS AFTER EACH STORM.
- 12. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED BY LOCAL JURISDICTION'S ENGINEERING DEPARTMENT OR BUILDING OFFICIALS.
- 13. MEASURES SHALL BE TAKEN TO COLLECT OR CLEAN ANY ACCUMULATION OR DEPOSIT OF DIRT, MUD, SAND, ROCKS, GRAVEL OR DEBRIS ON THE SURFACE OF ANY STREET. ALLEY OR PUBLIC PLACE OR IN ANY PUBLIC STORM DRAIN SYSTEMS. THE REMOVAL OF AFORESAID SHALL BE DONE BY STREET SWEEPING OR HAND SWEEPING. WATER SHALL NOT BE USED TO WASH SEDIMENTS INTO PUBLIC OR PRIVATE DRAINAGE FACILITIES.
- 14. EROSION CONTROL MEASURES SHALL BE ON-SITE FROM OCTOBER 15TH THROUGH APRIL 15TH.
- 15. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED THROUGHOUT THE RAINY SEASON OR FROM OCTOBER 15TH THROUGH APRIL 15TH, WHICHEVER IS GREATER.
- 16. PLANS SHALL BE DESIGNED TO MEET C3 REQUIREMENTS OF THE MUNICIPAL STORMWATER REGIONAL PERMIT("MRP") NPDES PERMIT CAS 612008.
- 17. THE CONTRACTOR TO NPDES (NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM) BEST MANAGEMENT PRACTICES (BMP) FOR SEDIMENTATION PREVENTION AND EROSION CONTROL TO PREVENT DELETERIOUS MATERIALS OR POLLUTANTS FROM ENTERING THE TOWN OR COUNTY STORM DRAIN
- 18. THE CONTRACTOR MUST INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO THE INCEPTION OF ANY WORK ONSITE AND MAINTAIN THE MEASURES UNTIL THE COMPLETION OF ALL LANDSCAPING.
- 19. THE CONTRACTOR SHALL MAINTAIN ADJACENT STREETS IN A NEAT, CLEAN DUST FREE AND SANITARY CONDITION AT ALL TIMES AND TO THE SATISFACTION OF THE TOWN INSPECTOR. THE ADJACENT STREET SHALL AT ALL TIMES BE KEPT CLEAN OF DEBRIS, WITH DUST AND OTHER NUISANCE BEING CONTROLLED AT ALL TIMES. THE CONTRACTOR BE RESPONSIBLE FOR ANY CLEAN UP ON ADJACENT STREETS AFFECTED BY THE BY THEIR CONSTRUCTION, METHOD OF STREET CLEANING SHALL BE BY DRY SWEEPING OF ALL PAVED AREAS. NO STOCKPILING OF BUILDING MATERIALS WITHIN THE TOWN RIGHT-OF-WAY.
- 20. SEDIMENTS AND OTHER MATERIALS SHALL NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONTRACTOR SHALL INSTALL A STABILIZED CONSTRUCTION ENTRANCE PRIOR TO THE INSPECTION OF ANY WORK ONSITE AND MAINTAIN IT FOR THE DURATION OF THE CONSTRUCTION PROCESS SO AS TO NOT INHIBIT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC RIGHT-OF-WAY UNTIL THE COMPLETION OF ALL LANDSCAPING.
- 21. THE CONTRACTOR SHALL PROTECT DOWN SLOPE DRAINAGE COURSES, STREAMS AND STORM DRAINS WITH ROCK FILLED SAND BAGS, TEMPORARY SWALES, SILT FENCES, AND EARTH PERMS IN CONJUNCTION OF ALL LANDSCAPING.
- 22. STOCKPILED MATERIALS SHALL BE COVERED WITH VISQUEEN OR A TARPAULIN UNTIL THE MATERIAL IS REMOVED FROM THE SITE. ANY REMAINING BARE SOIL THAT EXISTS AFTER THE STOCKPILE HAS BEEN REMOVED SHALL BE COVERED UNTIL A NATURAL GROUND COVER IS ESTABLISHED OR IT IS SEEDED OR PLANTED TO PROVIDE GROUND COVER PRIOR TO THE FALL RAINY SEASON.
- 23. EXCESS OR WASTE CONCRETE MUST NOT BE WASHED INTO THE PUBLIC RIGHT-OF-WAY OR ANY OTHER DRAINAGE SYSTEM. PROVISIONS SHALL BE MADE TO RETAIN CONCRETE WASTES ON SITE UNTIL THEY CAN BE DISPOSED OF AS SOLID WASTE.
- 24. TRASH AND CONSTRUCTION RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION AND DISPERSAL BY WIND

EROSION CONTROL NOTES CONTINUED:

- 25. DUST CONTROL SHALL BE DONE BY WATERING AND AS OFTEN AS REQUIRED BY THE
- 26. SILT FENCE(S) AND/OR FIBER ROLL(S) SHALL BE INSTALLED PRIOR TO OCTOBER 15TH AND SHALL REMAIN IN PLACE UNTIL THE LANDSCAPING GROUND COVER IS INSTALLED. CONTRACTOR SHALL CONTINUOUSLY MONITOR THESE MEASURES, FOLLOWING AND DURING ALL RAIN EVENTS.TO PUBLIC OWNED FACILITIES.

PROTECTION

EROSION CONTROL MEASURES:

- 1. THE FACILITIES SHOWN ON THIS PLAN ARE DESIGNED TO CONTROL EROSION AND SEDIMENT DURING THE RAINY SEASON, OCTOBER 15TH TO APRIL 15. EROSION CONTROL FACILITIES SHALL BE IN PLACE PRIOR TO OCTOBER 15TH OF ANY YEAR. GRADING OPERATIONS DURING THE RAINY SEASON WHICH LEAVE DENUDED SLOPES SHALL BE PROTECTED WITH EROSION CONTROL MEASURES IMMEDIATELY FOLLOWING GRADING ON THE SLOPES.
- 2. SITE CONDITIONS AT TIME OF PLACEMENT OF EROSION CONTROL MEASURES WILL VARY. APPROPRIATE ACTION INCLUDING TEMPORARY SWALES, INLETS, HYDROSEEDING, STRAW BALES, ROCK SACKS, ETC. SHALL BE TAKEN TO PREVENT EROSION AND SEDIMENTATION FROM LEAVING SITE. EROSION CONTROL MEASURES SHALL BE ADJUSTED AS THE CONDITIONS CHANGE AND THE NEED OF CONSTRUCTION SHIFT.
- 3. CONSTRUCTION ENTRANCES SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF GRADING. ALL CONSTRUCTION TRAFFIC ENTERING ONTO THE PAVED ROADS MUST CROSS THE STABILIZED CONSTRUCTION ENTRANCES. CONTRACTOR SHALL MAINTAIN STABILIZED ENTRANCE AT EACH VEHICLE ACCESS POINT TO EXISTING PAVED STREETS. ANY MUD OR DEBRIS TRACKED ONTO PUBLIC STREETS SHALL BE REMOVED DAILY AND AS REQUIRED BY THE GOVERNING AGENCY.
- 4. ALL EXPOSED SLOPES THAT ARE NOT VEGETATED SHALL BE HYDROSEEDED. IF HYDROSEEDING IS NOT USED OR IS NOT EFFECTIVE BY OCTOBER 1ST, THEN OTHER IMMEDIATE METHODS SHALL BE IMPLEMENTED, SUCH AS EROSION CONTROL BLANKETS, OR A THREE-STEP APPLICATION OF 1) SEED, MULCH, FERTILIZER 2) BLOWN STRAW 3) TACKIFIER AND MULCH. HYDROSEEDING SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF SECTION 20" EROSION CONTROL AND HIGHWAY PLANTING" OF THE STANDARD SPECIFICATION OF THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION, AS LAST REVISED. REFER TO THE EROSION CONTROL SECTION OF THE GRADING SPECIFICATIONS THAT ARE A PART OF THIS PLAN SET FOR FURTHER INFORMATION.
- 5. INLET PROTECTION SHALL BE INSTALLED AT OPEN INLETS TO PREVENT SEDIMENT FROM ENTERING THE STORM DRAIN SYSTEM. INLETS NOT USED IN CONJUNCTION WITH EROSION CONTROL ARE TO BE BLOCKED TO PREVENT ENTRY OF SEDIMENT. MINIMUM INLET PROTECTION SHALL CONSIST OF A ROCK SACKS OR AS SHOWN ON THIS PLAN
- 6. THIS EROSION AND SEDIMENT CONTROL PLAN MAY NOT COVER ALL THE SITUATIONS THAT MAY ARISE DURING CONSTRUCTION DUE TO UNANTICIPATED FIELD CONDITIONS. VARIATIONS AND ADDITIONS MAY BE MADE TO THIS PLAN IN THE FIELD. A REPRESENTATIVE OF LEA & BRAZE ENGINEERING SHALL PERFORM A FIELD REVIEW AND MAKE RECOMMENDATIONS AS NEEDED. CONTRACTOR IS RESPONSIBLE TO NOTIFY LEA & BRAZE ENGINEERING AND THE GOVERNING AGENCY OF ANY CHANGES.
- 7. THE EROSION CONTROL MEASURES SHALL CONFORM TO THE LOCAL JURISDICTION'S STANDARDS AND THE APPROVAL OF THE LOCAL JURISDICTION'S ENGINEERING DEPARTMENT.
- 8. STRAW ROLLS SHALL BE PLACED AT THE TOE OF SLOPES AND ALONG THE DOWN SLOPE PERIMETER OF THE PROJECT. THEY SHALL BE PLACED AT 25 FOOT INTERVALS ON GRADED SLOPES. PLACEMENT SHALL RUN WITH THE CONTOURS AND ROLLS SHALL BE TIGHTLY END BUTTED. CONTRACTOR SHALL REFER TO MANUFACTURES SPECIFICATIONS FOR PLACEMENT AND INSTALLATION INSTRUCTIONS.

REFERENCES:

- 1. CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD'S FIELD MANUAL FOR EROSION AND SEDIMENTATION CONTROL
- 2. CALIFORNIA STORM WATER QUALITY ASSOCIATION BEST MANAGEMENT PRACTICES HANDBOOK FOR CONSTRUCTION

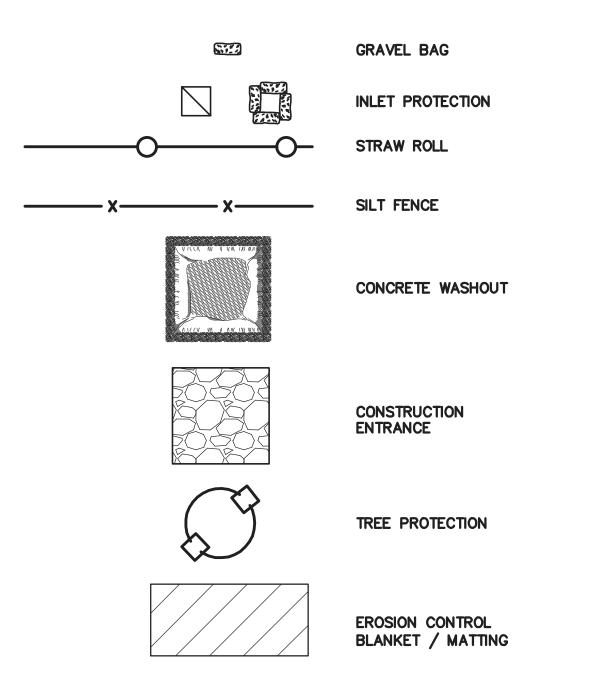
PERIODIC MAINTENANCE:

- 1. MAINTENANCE IS TO BE PERFORMED AS FOLLOWS:
- A. DAMAGES CAUSED BY SOIL EROSION OR CONSTRUCTION SHALL BE REPAIRED AT THE END OF EACH WORKING DAY.
- B. SWALES SHALL BE INSPECTED PERIODICALLY AND MAINTAINED AS
- C. SEDIMENT TRAPS, BERMS, AND SWALES ARE TO BE INSPECTED AFTER EACH STORM AND REPAIRS MADE AS NEEDED.
- D. SEDIMENT SHALL BE REMOVED AND SEDIMENT TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO A DEPTH OF 1' FOOT.
- E. SEDIMENT REMOVED FROM TRAP SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
- F. RILLS AND GULLIES MUST BE REPAIRED.
- 2. GRAVEL BAG INLET PROTECTION SHALL BE CLEANED OUT WHENEVER SEDIMENT DEPTH IS ONE HALF THE HEIGHT OF ONE GRAVEL BAG.
- 3. STRAW ROLLS SHALL BE PERIODICALLY CHECKED TO ASSURE PROPER FUNCTION AND CLEANED OUT WHENEVER THE SEDIMENT DEPTH REACHED HALF THE HEIGHT OF THE ROLL.
- 4. SILT FENCE SHALL BE PERIODICALLY CHECKED TO ASSURE PROPER FUNCTION AND CLEANED OUT WHENEVER THE SEDIMENT DEPTH REACHES ONE FOOT IN HEIGHT.
- 5. CONSTRUCTION ENTRANCE SHALL BE REGRAVELED AS NECESSARY FOLLOWING SILT/SOIL BUILDUP.
- 6. ANY OTHER EROSION CONTROL MEASURES SHOULD BE CHECKED AT REGULAR INTERVALS TO ASSURE PROPER FUNCTION

- PROVIDE INLET PROTECTION -TYP. -PROVIDE CONCRETE WASHOUT PROVIDE STRAWROLLS LANDS OF -TYP. PROVIDE TREE F MILLER MAPS 50 PROVIDE SILT FENCE OR STRAW -ROLLS PLACED AT THE PERIMETER OF SITE SLOPES -TYP. PROVIDE HYDROSEEDING AND OR EROSION CONTROL FABRIC N71"11'19"E 10.75' PROVIDE ROCKED CONSTRUCTION ENTRANCE RELOCATE DURING CONSTRUCTION AS REQUIRED AT EASEMENT (212 M 50) SITE THE END OF PAVEMENT. PUBLIC UTILITY EASEMENT BENCHMARK LANDS OF SOM PROVIDE TEMPORARY GRAVEL BAGS OR STRAW BALES AT FLOW LINE AS SHOWN

SCALE: 1" = 30'

EROSION CONTROL LEGEND



SEAL ALL OTHER INLETS NOT INTENDED TO ACCEPT STORM WATER AND DIRECT FLOWS TEMPORARILY TO FUNCTIONAL SEDIMENTATION BASIN INLETS. -TYP



0 0 =

13 OF 07 SHEETS

PC #1 RESPONSES 03-12-21

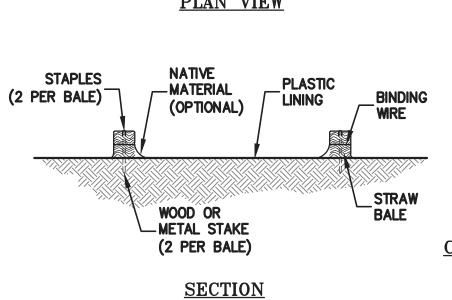
SHEET NO: **ER-2**

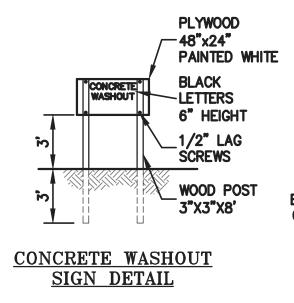
14 OF 07 SHEETS

CHECKED BY: RB

WILLOUGH VIVIVIVIA IN VIVIVI STRAW BALES 10 MIL_ PLASTIC LINING (ABOVE GRADE) -TYP PLAN VIEW

10' MIN.





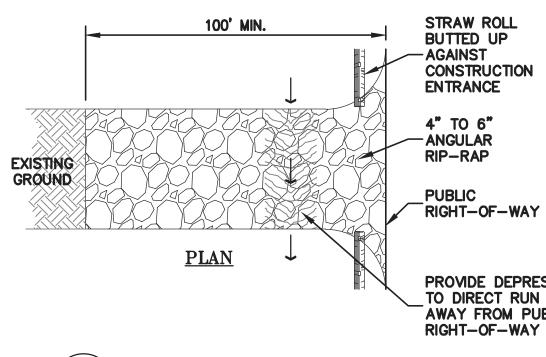
NOTES: ACTUAL LAYOUT DETERMINED

THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN

10' OF THE TEMPORARY CONCRETE WASHOUT FACILITY.

IN FIELD.

STAPLE DETAIL



12" MIN. PROVIDE APPROPRIATE TRANSITION GEOTEXTILE LINER BENEATH— BETWEEN STABILIZED CONSTRUCTION ENTRANCE **AGGREGATE** AND PUBLIC RIGHT-OF-WAY

_EXISTING GROUND

THE ENTRANCE SHALL BE KEPT IN GOOD CONDITION BY OCCASIONAL TOP DRESSING WITH MATERIAL AS SPECIFIED IN ABOVE NOTE. ACCESSES SHALL BE INSPECTED WEEKLY DURING PERIODS OF HEAVY USAGE, MONTHLY DURING NORMAL USAGE, AND AFTER EACH RAINFALL, WITH MAINTENANCE PROVIDED AS NECESSARY. PERIODIC TOP DRESSING SHALL BE DONE AS NEEDED. PROVIDE DEPRESSION TO DIRECT RUN OFF AWAY FROM PUBLIC

RIGHT-OF-WAY

NOTES:

STABILIZED CONSTRUCTION SITE

STONE AGGREGATE.

MINIMUM OF 100'.

ACCESS SHALL BE CONSTRUCTED OF 4" TO 6" WASHED, FRACTURED

MATERIAL SHALL BE PLACED TO A

LENGTH OF ENTRANCE SHALL BE A

WIDTH SHALL BE A MIN. OF 15' OR

GREATER IF NECESSARY TO COVER

EGRESS. PROVIDE AMPLE TURNING

ALL VEHICULAR INGRESS AND

MINIMUM THICKNESS OF 12".

CONSTRUCTION ENTRANCE ER-2

INLET PROTECTION

FILTER FABRIC _ TO COVER INLET

6" COBBLE_ STONE MIN

ER-2

STREET INLET PROTECTION ER-2

FLOW LINE-

STRAW ROLL

CONCRETE WASHOUT

ADJACENT ROLLS SHALL TIGHTLY ABUT DIG TROUGH 3" _TO 5" DEEP TO SET ROLL IN GROUND SEDIMENT.

-(N) INLET

1"X 1" STAKE

THE ROLL IN A TRENCH, 3" TO 5" DEEP, DUG ON CONTOUR. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND ROLL. 2. CONTRACTOR IS RESPONSIBLE FOR REGULAR MAINTENANCE AND INSPECTION. THE

SILT SHALL BE CLEANED OUT WHEN IT REACHES HALF THE HEIGHT OF THE ROLL.

STRAW ROLLS ER-2

TOWN OF LOS ALTOS HILLS 26379 Fremont Road Los Altos Hills, CA 94022 Phone: (650) 941-7222 www.losaltoshills.ca.gov **Tree Fencing Requirements** 4/1/04 Per Section 12-2.502.a of the Los Altos Hills Municipal Code: The Town" shall seek to preserve and protect existing trees, especially Heritage Oaks and Heritage Trees, from unnecessary removal or damage by placing conditions on development approvals." Prior to beginning any grading operation, all significant trees are to be fenced at the drip line. Town staff must inspect the fencing and the trees to be fenced prior to commencement of grading. The property owner shall call for said inspection at least three days in advance of the inspection. The fencing must remain throughout the course of construction. Tree fencing requirements: Fencing shall be located at the drip line of the tree or trees. • All trees to be preserved shall be protected with chain link fences with a minimum height of five feet (5') above grade. • Fences are to be mounted on two-inch diameter galvanized iron posts, driven into the ground to a depth of at least two feet (2') at no more than 10-foot spacing. • Fencing shall be rigidly supported and maintained during all construction periods. • No storage of equipment, vehicles or debris shall be allowed within the drip lines of these trees at any time. • No trenching shall occur beneath the drip line of any trees to be saved.

GRAVEL BAG CONSISTS OF A BURLAP SACK FILLED WITH 3/4"
CRUSHED, CLEAN DRAIN ROCK

FILTER FABRIC

GRATES & INLET

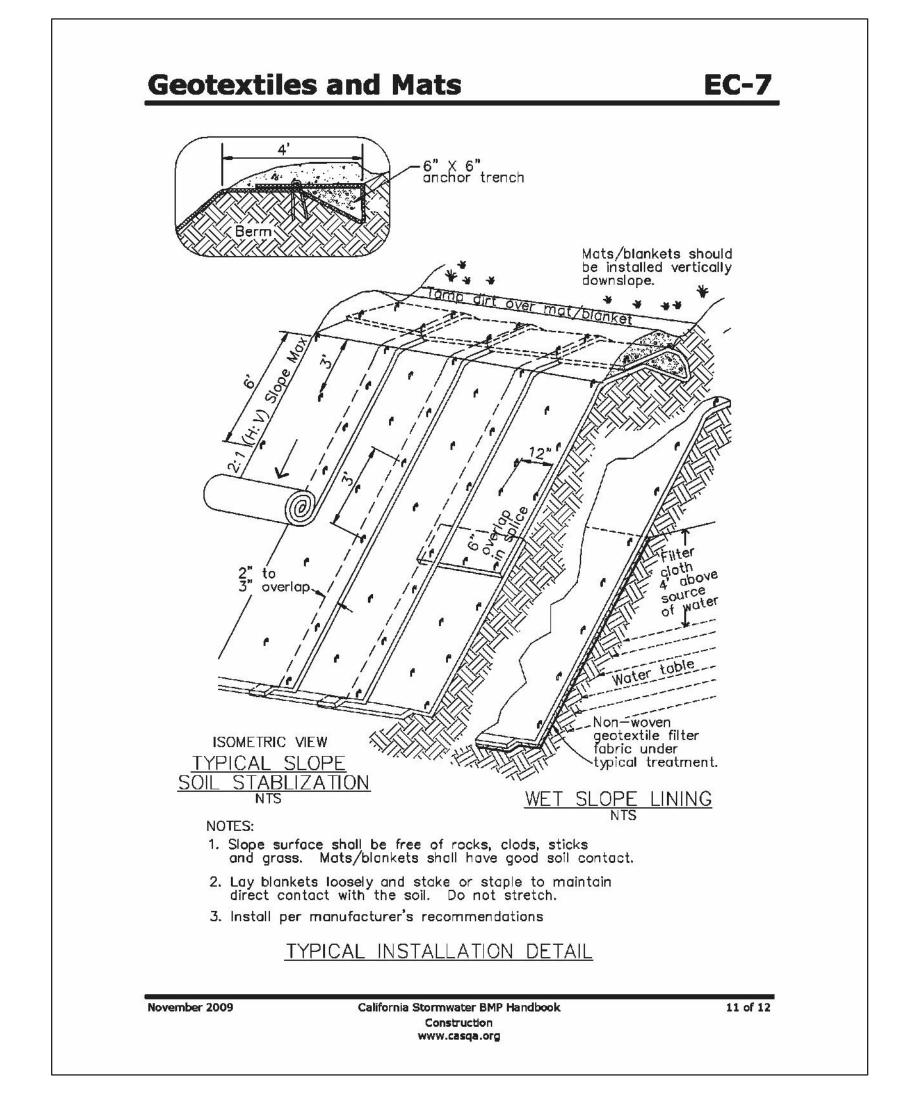
PLACED

-BETWEEN

COVER

GRAVEL BAGS SHALL SIT ON TOP OF EACH SIDE OF STRAW ROLL AND OVERLAP ON CURB

LOS ALTOS HILLS TREE FENCING REQUIREMENT



GEOTEXTILE & MATS

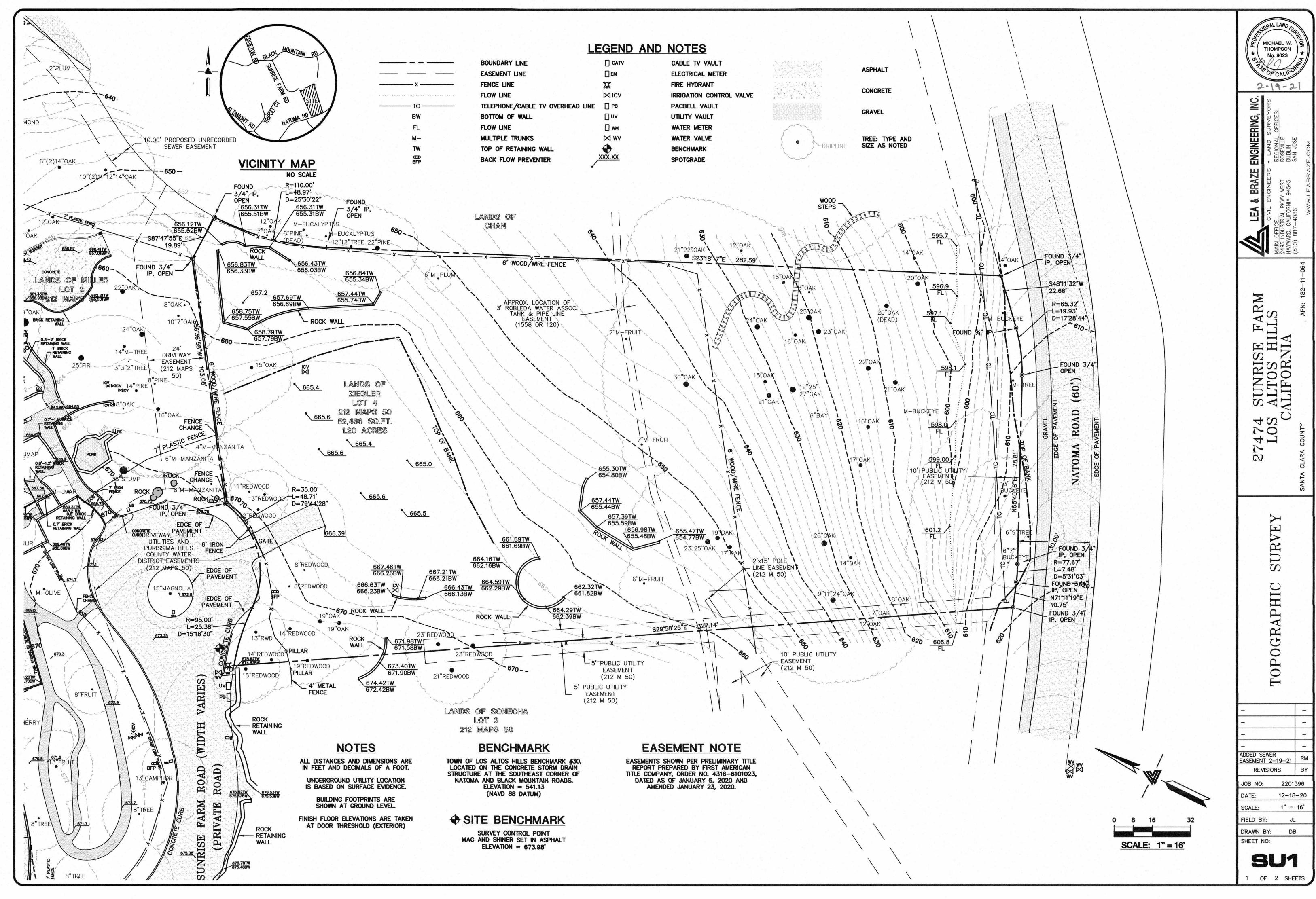
SEE EROSION CONTROL PLAN ORGANIC MATTER, AND NATIVE SEEDS ARE CAPTURED BEHIND THE ROLLS.

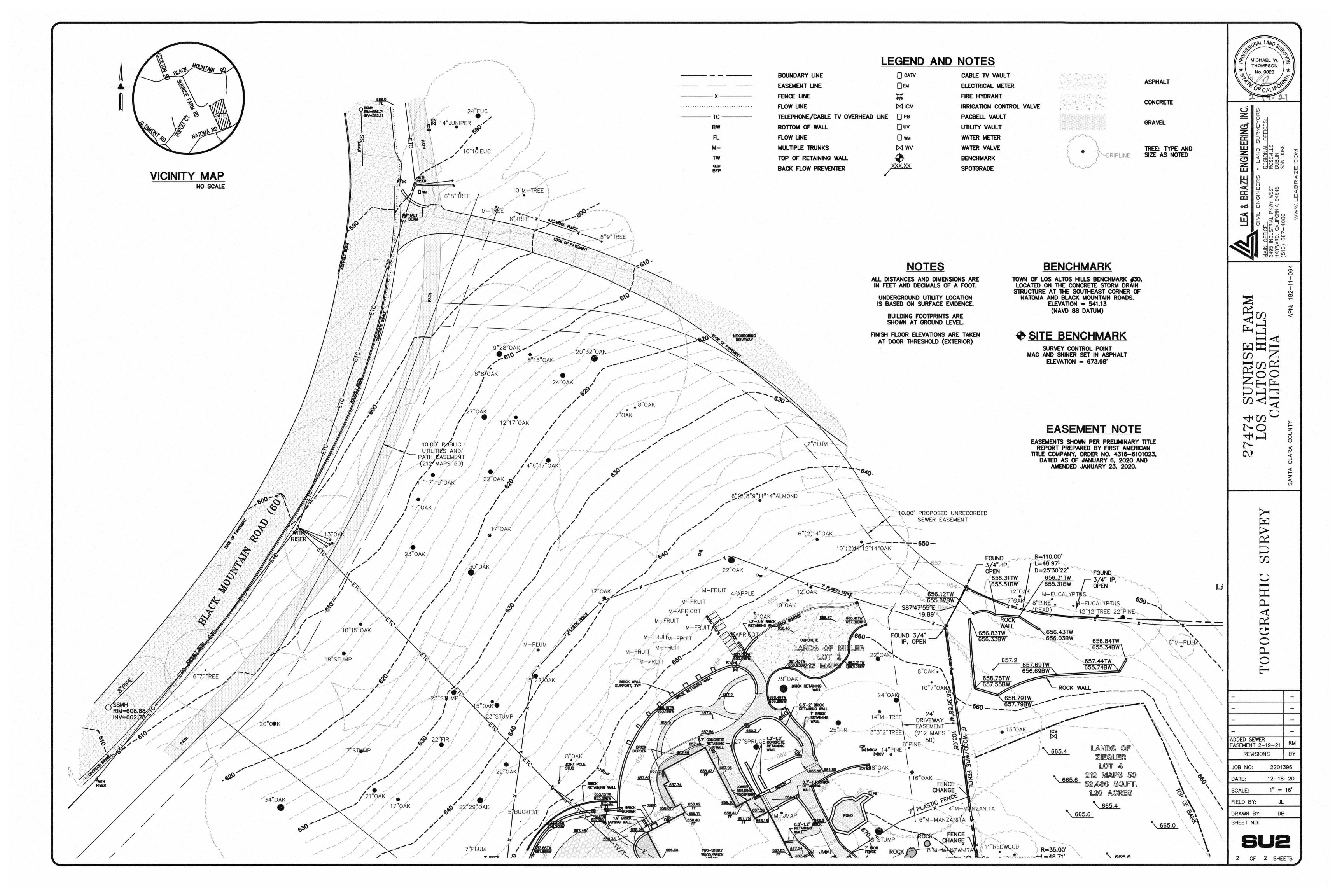
NOTE:

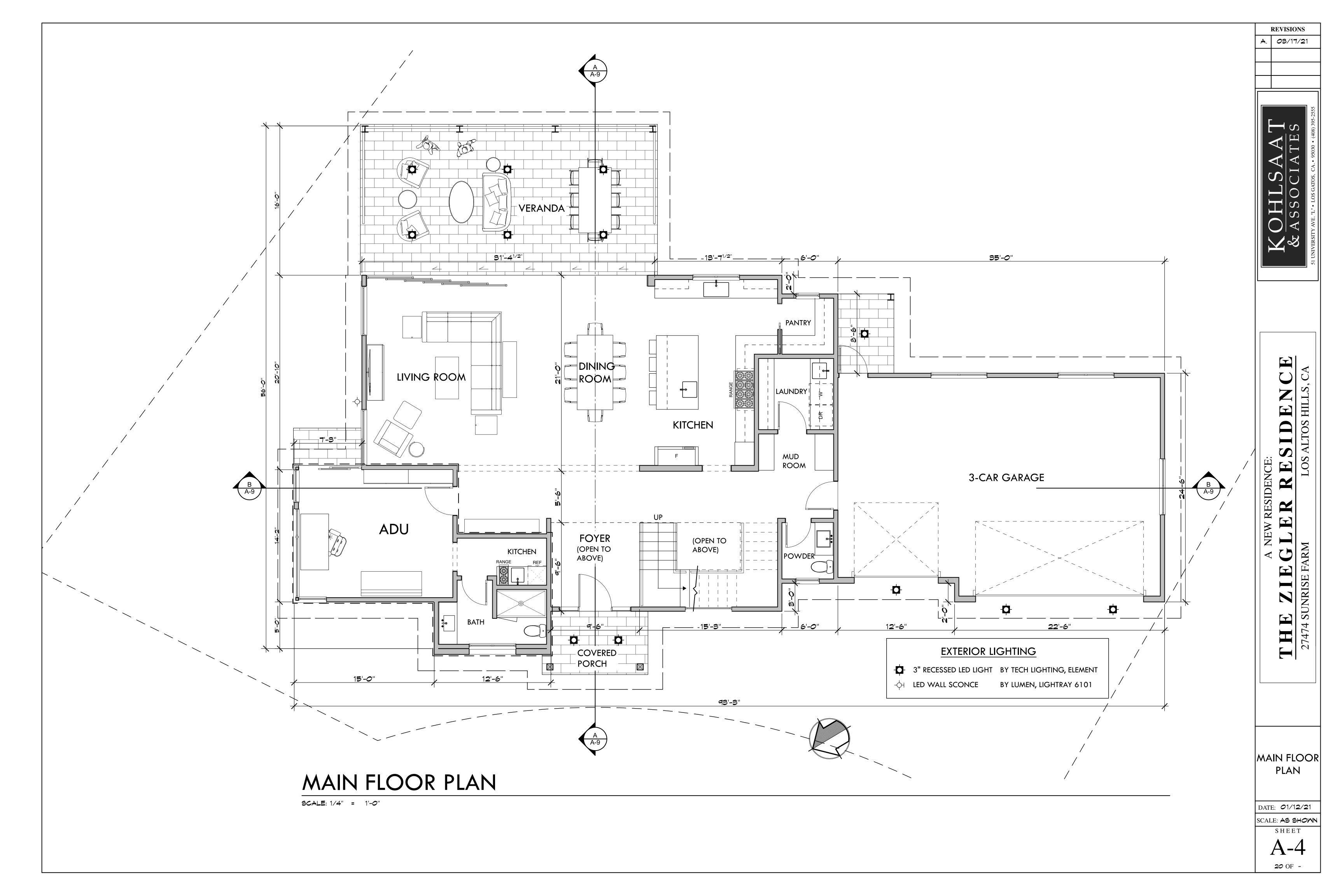
1. STRAW ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF

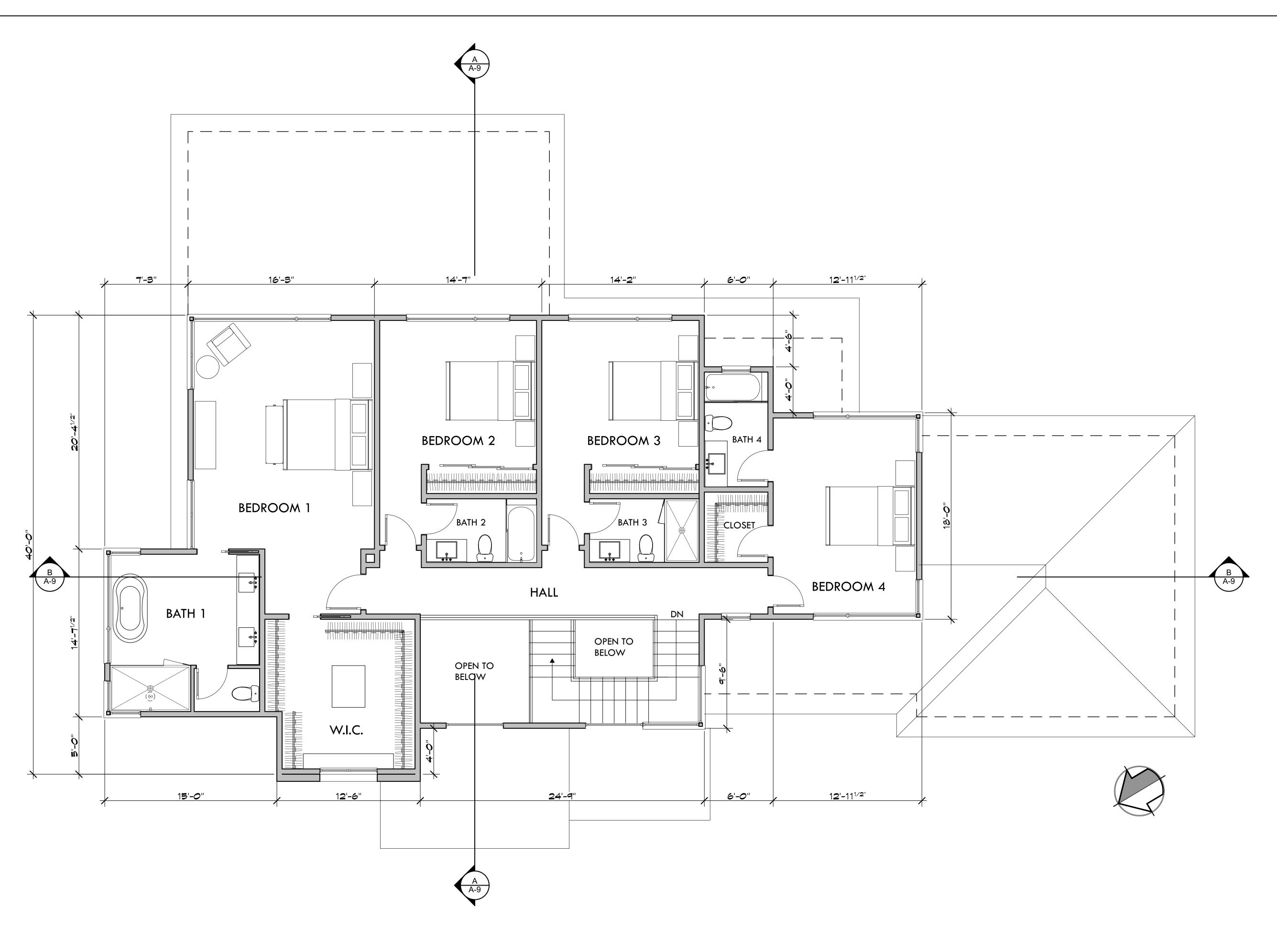
THE PLACEMENT AND SECURE STAKING OF

THE PLACEMENT AND SECURE STAKING OF









SECOND FLOOR PLAN

SCALE: 1/4" = 1'-0"

REVISIONS

A. 03/17/21

KOHLSAATTES

IEGLER RESIDENCE:

OF FARM

OF ALTOCHIT & CA

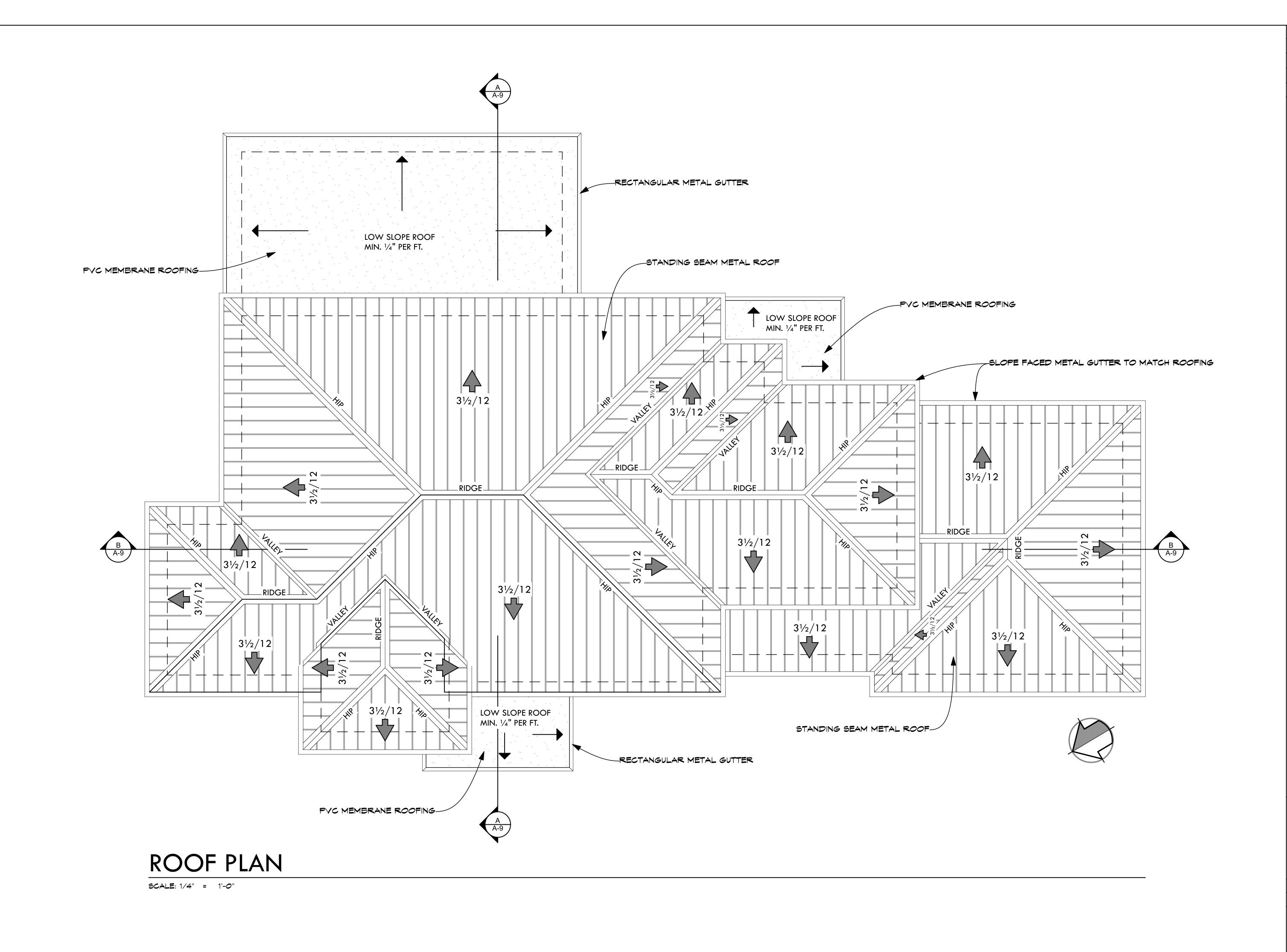
SECOND FLOOR PLAN

DATE: 01/12/21

SCALE: AS SHOWN

SHEET

A-5



REVISIONS

A. 03/17/21

 $\frac{K}{\& ASSOCIATES}$

A NEW RESIDENCE:

GLER RESIDENCE

A SADA

THE ZIEGI
27474 SUNRISE FARM

ROOF PLAN

DATE: 01/12/21

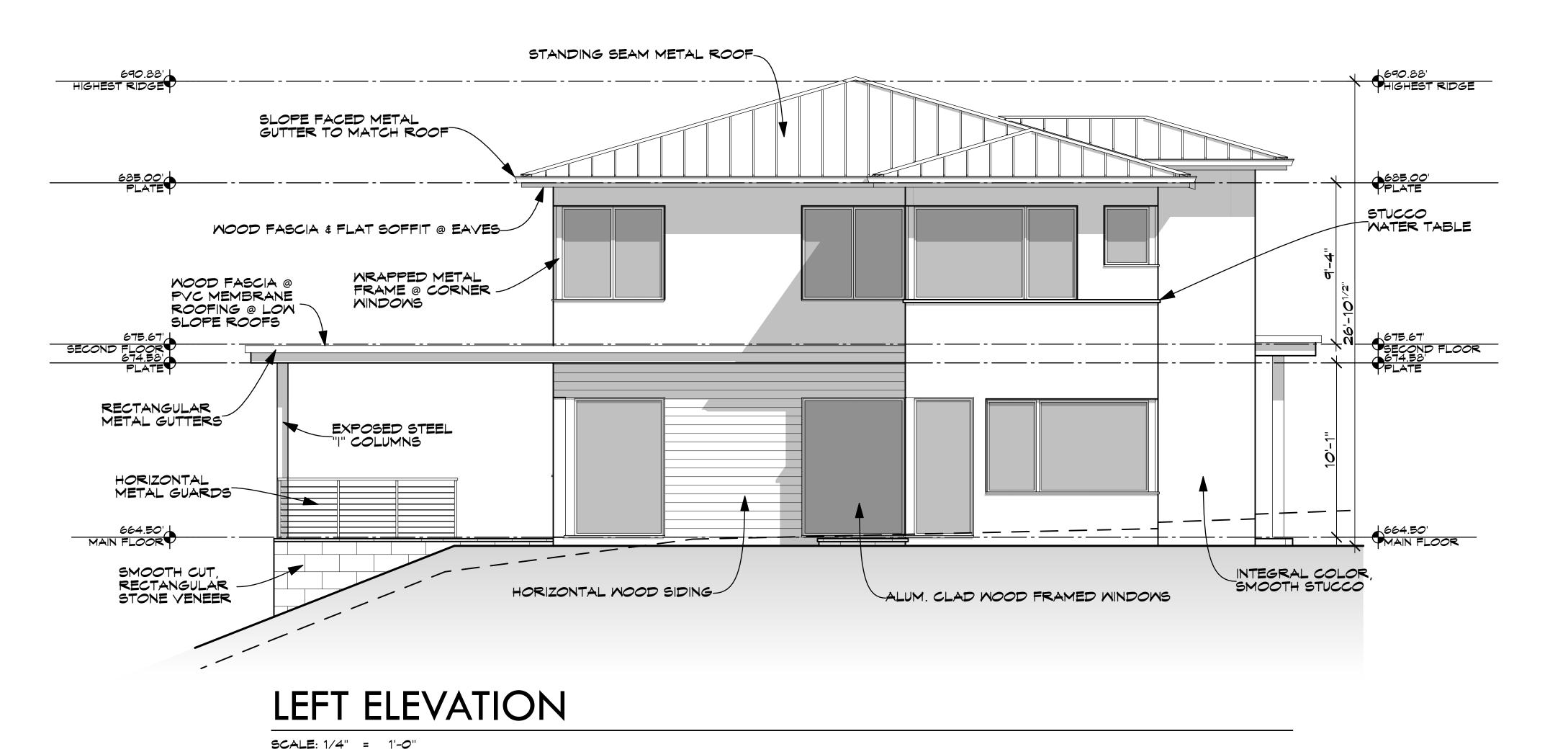
SCALE: AS SHOWN

A-6

SHEET

FRONT ELEVATION

SCALE: 1/4" = 1'-0"



REVISIONS

A. 03/17/21

 $\frac{K}{\& ASSOCIATES}$

RESIDENCE:

RESIDENCE:

RESIDENCE

RESIDENCE

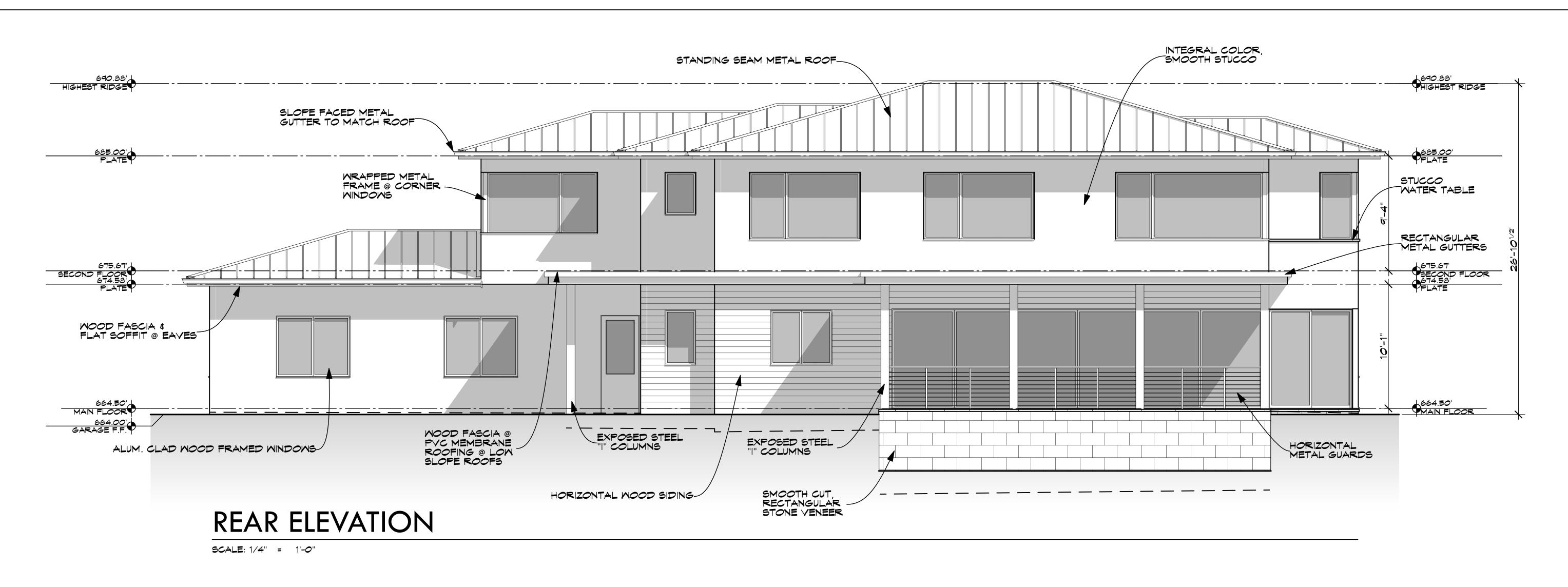
HE ZIEGLER

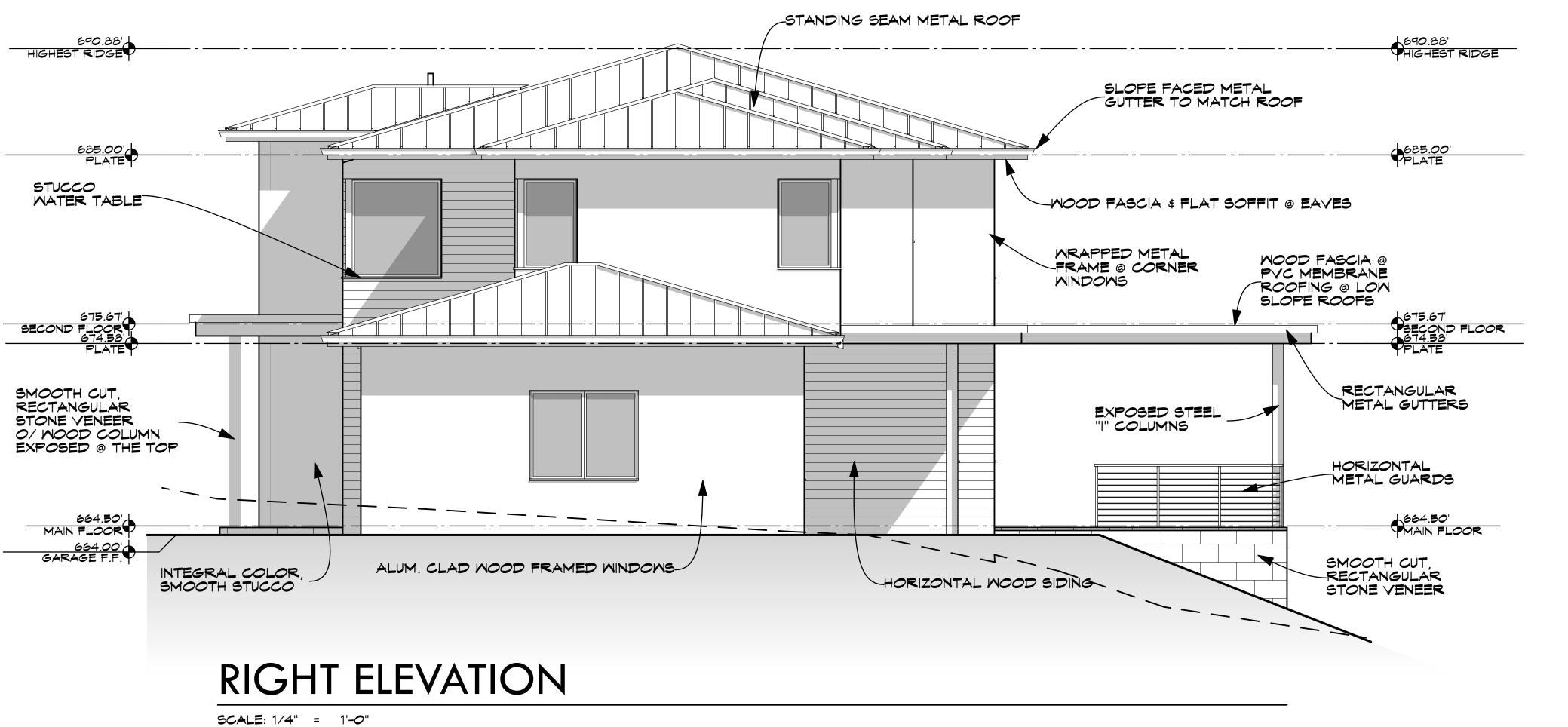
NEW

FRONT &
LEFT
ELEVATIONS

DATE: 01/12/21
SCALE: AS SHOWN

A-7





REVISIONS

A. 03/17/21

KOHLSAAT &ASSOCIATES

NEW RESIDENCE:

LER RESIDENCE

THE ZIEGL
27474 SUNRISE FARM

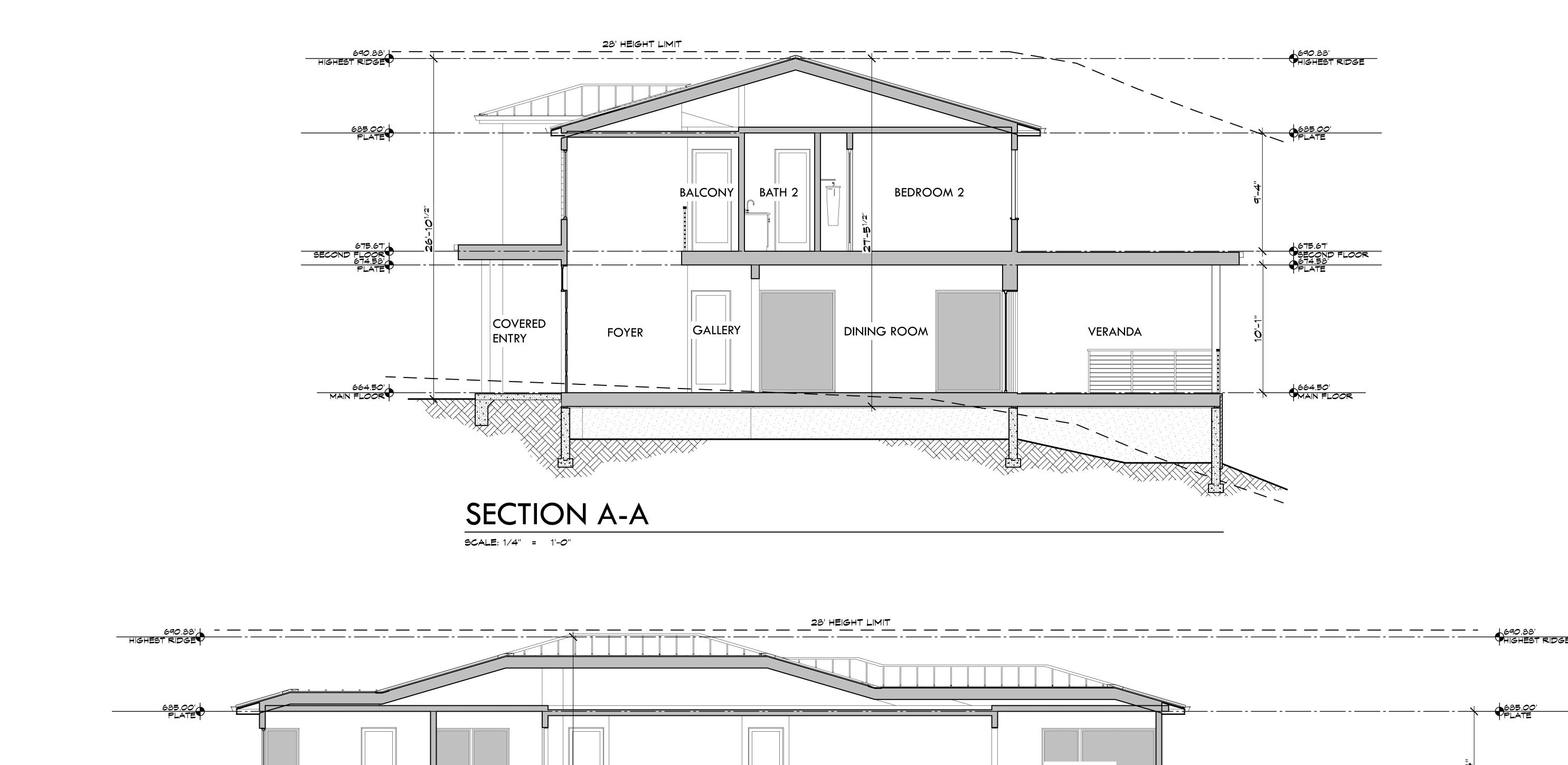
REAR & RIGHT ELEVATIONS

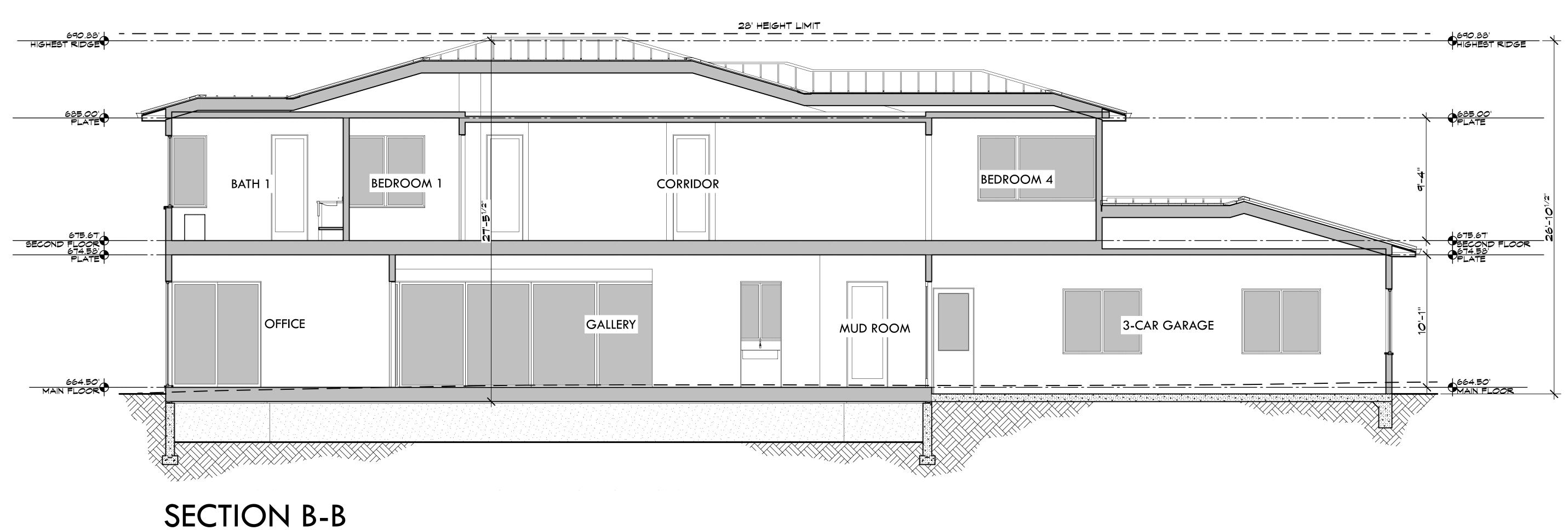
DATE: 01/12/21

SCALE: AS SHOWN

SHEET







SCALE: 1/4" = 1'-0"

REVISIONS

A. 03/17/21

KOHLSAATTES

NEW RESIDENCE:

LER RESIDENCE

THE ZIEGLER R
27474 SUNRISE FARM

CROSS SECTIONS

DATE: 01/12/21

SCALE: AS SHOWN

sнеет **А-9**

CONCRETE VALLEY GUTTER

STORM DRAIN MANHOLE

SANITARY SEWER MANHOLE

EARTHEN SWALE

CATCH BASIN

AREA DRAIN

CURB INLET

FIRE HYDRANT

STREET SIGN

SPOT ELEVATION

FLOW DIRECTION

BENCHMARK

DEMOLISH/REMOVE

TREE TO BE REMOVED

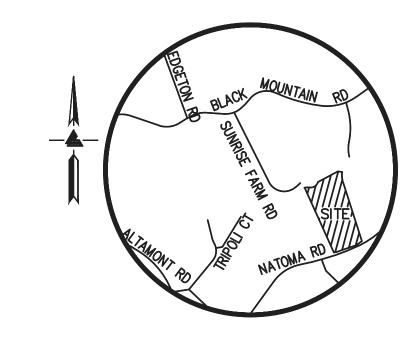
LEGEND

EXISTING

SANITARY SEWER LATERAL PLAN 27474 SUNRISE FARM LOS ALTOS HILLS, CALIFORNIA

AREA OF DETAIL -SEE SHEET 2-2.0

KEY MAP



VICINITY MAP

OWNER'S INFORMATION

DAVID ZIEGLER 960 N. SAN ANTONIO ROAD, UNIT 236 LOS ALTOS, CA 94022

REFERENCES

THIS GRADING AND DRAINAGE PLAN IS SUPPLEMENTAL TO:
1. TOPOGRAPHIC SURVEY BY LEA AND BRAZE ENGINEERING, "TOPOGRAPHIC SURVEY 27474 SUNRISE FARM LOS ALTOS HILLS, CA DATED: 12-18-20 JOB# 2201396

THE CONTRACTOR SHALL REFER TO THE ABOVE NOTED SURVEY AND PLAN, AND SHALL VERIFY BOTH EXISTING AND PROPOSED ITEMS ACCORDING TO THEM.

TOWN OF LOS ALTOS HILLS SANITARY SEWER CONSTRUCTION NOTES TOWN OF LOS ALTOS HILLS SANITARY

SEWER CONSTRUCTION NOTES SANITARY SEWER EXTENSION PLAN

DETAILS C - 3.0

TCP-1 TRAFFIC CONTROL NOTES TCP-2 TRAFFIC CONTROL PLAN

ABBREVIATIONS AGGREGATE BASE LANDING ASPHALT CONCRETE LINEAR FEET **ACCESSIBLE** MAXIMUM AREA DRAIN MANHOLE MINIMUM BEGINNING OF CURVE **BEARING & DISTANCE MONUMENT** BENCHMARK **BSBL BUILDING SETBACK LINE NUMBER** BW/FG BOTTOM OF WALL/FINISH NOT TO SCALE GRADE ON CENTER CATCH BASIN CURB AND GUTTER PLANTING AREA CENTER LINE PEDESTRIAN CORRUGATED PLASTIC PIPE POST INDICATOR VALVE (SMOOTH INTERIOR) PUBLIC SERVICES EASEMENT CLEANOUT PROPERTY LINE COTG CLEANOUT TO GRADE POWER POLE CONC CONCRETE PUBLIC UTILITY EASEMENT CONST CONSTRUCT or -TION POLYVINYL CHLORIDE CONC COR CONCRETE CORNER RADIUS CUBIC YARD REINFORCED CONCRETE PIPE DIAMETER RIM ELEVATION DROP INLET RAINWATER DUCTILE IRON PIPE RIGHT OF WAY END OF CURVE EXISTING GRADE SANITARY **ELEVATIONS** STORM DRAIN **EDGE OF PAVEMENT** STORM DRAIN MANHOLE **EQUIPMENT** SHEET EACH WAY SEE LANDSCAPE DRAWINGS **EXISTING SPEC** SPECIFICATION FACE OF CURB SANITARY SEWER FINISHED FLOOR **SSCO** SANITARY SEWER CLEANOUT FINISHED GRADE **SSMH** SANITARY SEWER MANHOLE FIRE HYDRANT STREET FLOW LINE **STATION** FINISHED SURFACE **STANDARD STRUCT** STRUCTURAL GAGE OR GAUGE **TELEPHONE** GRADE BREAK TOP OF CURB GRADING SETBACK LINE TEMPORARY HIGH DENSITY CORRUGATED TOP OF PAVEMENT POLYETHYLENE PIPE TOP OF WALL/FINISH GRADE **HORIZONTAL** TYPICAL HIGH POINT VERTICAL CURVE **HUB & TACK** VITRIFIED CLAY PIPE INSIDE DIAMETER VERTICAL INVERT ELEVATION JUNCTION BOX

JOINT TRENCH

JOINT UTILITY POLE

WATER LINE

WATER METER

WELDED WIRE FABRIC

GENERAL NOTES:

- 1. CONTRACTOR SHALL CONTACT UNDERGROUND SERVICES ALERT (U.S.A.) 1-800-277-2600, 48 HOURS PRIOR TO THE START OF ANY CONSTRUCTION WORK TO VERIFY ELEVATIONS AND LOCATIONS OF ALL EXISTING UTILITIES.
- 2. CONTRACTOR ASSUMES SOLE AND COMPLETE RESPONSIBILITY FOR THE SITE CONDITIONS.
- 3. CONTRACTOR IS TO VERIFY WORK IN FIELD AND SHALL SATISFY HIMSELF/HERSELF AS TO THE ACCURACY BETWEEN THE WORK SET FORTH ON THESE PLANS AND THE WORK IN THE FIELD. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO START OF CONSTRUCTION.
- 4. WORK SHALL NOT BEGIN UNTIL ADEQUATE TEMPORARY BARRICADES, BARRIERS, FENCES, WARNING SIGNS, LIGHTS, OR OTHER SUCH TRAFFIC AND PEDESTRIAN WARNING AND CONTROL DEVICES ARE IN PLACE.
- 5. ALL TRENCHING OPERATIONS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF TITLE 8 (OSHA)
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE ON OR OFF THE PROJECT SITE AS A RESULT OF LACK OF DUST
- 7. CONTRACTOR SHALL REPLACE OR REPAIR, AT HIS OWN EXPENSE, ALL DAMAGED IMPROVEMENTS OR FEATURES TO THEIR ORIGINAL CONDITIONS, WHETHER SPECIFICALLY INDICATED ON THE PLANS OR NOT.
- SEE ARCHITECTURAL DRAWINGS 8. CONTRACTOR SHALL PREPARE A SUITABLE GRADE FOR ALL UNDERGROUND UTILITY INSTALLATIONS AND SHALL BE RESPONSIBLE FOR ALL UTILITY TRENCH SPOILS AND SHALL RESTORE THE GRADE UPON THE COMPLETION OF UNDERGROUND WORK.
 - 9. ALL WORK IN THE PUBLIC RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH THE TOWN OF LOS ALTOS HILLS STANDARDS.
 - 10. UPON SATISFACTORY COMPLETION OF THE WORK, THE ENTIRE WORK SITE SHALL BE CLEANED UP AND LEFT WITH A SMOOTH AND NEATLY GRADED SURFACE FREE OF CONSTRUCTION WASTE, RUBBISH, AND DEBRIS OF ANY NATURE BY THE CONTRACTOR TO THE SATISFACTION OF THE OWNER.
 - 11. DURING THE COURSE OF THE PROJECT, THE CONTRACTOR SHALL KEEP A RECORD OF ALL CONSTRUCTION CHANGES ON A SET OF APPROVED PROJECT PLANS FOR THE ENGINEER.
 - 12. CONTRACTOR SHALL COMPLY WITH ALL STATE, COUNTY, AND CITY LAWS AND ORDINANCES; AND REGULATIONS OF THE DEPT. OF INDUSTRIAL RELATIONS, OSHA, AND INDUSTRIAL ACCIDENT COMMISSION RELATIONS TO SAFETY AND CHARACTER OF WORK, EQUIPMENT AND LABOR PERSONNEL.
 - 13. THE PROPOSED CONSTRUCTION OPERATION WILL TAKE PLACE AT OR NEAR FENCE LINES, PROPERTY LINES AND PROPERTY IMPROVEMENTS THAT SHALL BE MAINTAINED AT ALL TIMES DURING THE CONSTRUCTION OPERATION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO IDENTIFY THESE AREAS PRIOR TO BEGINNING CONSTRUCTION.

SPECIAL INSPECTION REQUIRED

SPECIAL INSPECTION OF UTILITY PIPES AND STRUCTURES: NUMEROUS JURISDICTIONS ARE CURRENTLY REQUIRING SPECIAL INSPECTION BY THE CIVIL ENGINEER OF RECORD PRIOR TO BACKFILLING OF PIPES AND STRUCTURES. IF REQUIRED (OR DESIRED BY OWNER AND/OR CONTRACTOR) PLEASE CONTACT PETE CARLINO, 510.887.4086 TO SCHEDULE INSPECTIONS. 48 HOURS NOTICE MAY BE REQUIRED DEPENDING ON CURRENT

OSHA NOTE:

COMPLY WITH CAL/OSHA TITLE 8 REGULATIONS PAYING SPECIAL ATTENTION TO CHAPTER 4 - DIVISION OF INDUSTRIAL SAFETY, SUBCHAPTER 4, ARTICLE 6 REGARDING EXCAVATIONS. THE CONTRACTOR SHALL INSTALL "PROTECTIVE SYSTEMS" FOR TRENCHES DEEPER THAN 5 FEET IN DEPTH AND "ACCESS AND EGRESS" FOR TRENCHES GREATER THAN 4 FEET IN DEPTH AS PER CAL/OSHA REQUIREMENTS.

BENCHMARK

TOWN OF LOS ALTOS HILLS BENCHMARK #30, LOCATED ON THE CONCRETE STORM DRAIN STRUCTURE AT THE SOUTHEAST CORNER OF NATOMA AND BLACK MOUNTAIN ROADS. ELEVATION = 541.13(NAVD 88 DATUM)

SITE BENCHMARK

SURVEY CONTROL POINT MAG AND SHINER SET IN ASPHALT ELEVATION = 673.98'

EASEMENT NOTE

EASEMENTS SHOWN PER PRELIMINARY TITLE REPORT PREPARED BY FIRST AMERICAN TITLE COMPANY. ORDER NO. 4316-6101023, DATED AS OF JANUARY 6, 2020 AND AMENDED JANUARY 23, 2020.

NOTES

ALL DISTANCES AND DIMENSIONS ARE IN FEET AND DECIMALS OF A FOOT.

> UNDERGROUND UTILITY LOCATION IS BASED ON SURFACE EVIDENCE. BUILDING FOOTPRINTS ARE

SHOWN AT GROUND LEVEL. FINISH FLOOR ELEVATIONS ARE TAKEN AT DOOR THRESHOLD (EXTERIOR)



REVISIONS JOB NO: 2201397 DATE: 03-12-21 SCALE:

AS NOTED DESIGN BY: TT DRAWN BY: WA SHEET NO:

01 OF 07 SHEETS

Town of Los Altos Hills **Sanitary Sewer Construction Standards**

GENERAL NOTES

- 1. All References to "Town" in these general notes shall mean Town of Los Altos Hills Public
- 2. All sanitary sewer workmanship and materials shall conform to requirements of current Town Standard Details, Construction Standards, and the City Engineer
- 3. The approval of these plans by the Town shall be interpreted to mean that the sanitary sewer design shown on these plans meets the Town's Standards. The Town's approval in no way guarantees any other aspect of this plan or its accuracy relative to actual field conditions.
- 4. The City Engineer is authorized to require modifications during construction.
- 5. The contractor shall contact the Town at 650-941-7222, two (2) working days in advance of beginning any sanitary sewer work. The contractor shall thereafter keep the Town Inspector informed of his schedule for sanitary sewer work.
- 6. Prior to commencement of excavation work, the contractor shall contact all utility companies by calling Underground Service Alert (USA) at 1-800-227-2600 at least forty-eight (48) hours prior to start of construction.
- 7. The contractor shall field verify the location of all utilities before beginning any excavation.
- 8. The contractor shall obtain any and all permits required by the Town before beginning any sanitary sewer work.
- 9. Contractor shall obtain encroachment permit prior to any work in the Town right-of-way. A pre-construction meeting is required with the Public Works Department.
- 10. Applicant shall provide sufficient deposit to the Town for inspection, testing, community outreach, staff time, arborist, traffic consultants, safety specialist and other services as determined by the City Engineer. Any outstanding deposit shall be paid in full prior to final sign off.
- 11. Sewer connection permits shall be issued by the Town for all proposed new connections.
- 12. Existing sanitary sewer service shall be maintained at all times. The contractor shall use whatever means necessary (e.g. pumps, bypass lines, etc.) to maintain this service during
- 13. Prior to commencing any sanitary sewer work in easements, the contractor shall provide the Town with adequate evidence that all affected property owners (and tenants where applicable) were notified forty-eight (48) hours prior to the date of work and that they have updated that notice in a timely manner when those dates have changed.
- 14. All sanitary sewer work constructed without inspection by the Town shall be removed and reconstructed with inspection.
- 15. All sanitary sewer laterals shall be 4" PVC-SDR 26 or approved equal, one per lot and marked with the letter 'S' on a post per Town's standards.
- 16. Sewer mains shall be minimum of 8" PVC-SDR 26 or approved equal and have (a) 1% minimum slope or as approved by the City Engineer, and (b) minimum self-cleaning velocity of 2 feet per second.

Town of Los Altos Hills Sanitary Sewer Construction Standards

- 17. Sewer laterals shall be a minimum of 4' below top of curb or finished ground at property line unless authorized by the City Engineer.
- 18. The contractor shall be responsible for verifying the elevation of all existing storm drains and sewers to be extended or connected prior to commencing work.
- 19. Traffic Control Plan shall be prepared by a licensed Traffic Engineer. Traffic Control Plan shall be in accordance with Town's construction standards and subject to review and approval of the City Engineer prior to permit issuance.
- 20. Two open traffic lanes are required during all non-working hours. One travel lane may be closed during work hours when flaggers are present.
- 21. Sewer trenches and permanent pavement within right-of-way and/or easements shall conform to Town's Standard Detail UT-1 and UT-2.
- 22. The contractor shall place temporary form fitting pieces of plywood or other suitable material over the bottoms of the manholes to prevent entry of foreign materials from the manhole to the pipe.
- 23. No open trenches in the street right-of-way will be allowed overnight. All trenches shall be backfill the same day the trench was excavated, except that portion of the trench or excavation to be used for connecting the extension of the installation. That said portion shall be adequately barricaded and protected to the satisfaction of the City Engineer or his representative. Excavations or trenches for poured in place concrete manhole may remain open for a period not to exceed seven days, providing said excavation or trenches are adequately barricaded, fenced, and plated with skid resistant steel plate of adequate thickness and flushed with pavement. The number of plates to be utilized each day shall be approved by the City Engineering or his representative.
- 24. All utility frames and covers, existing and proposed monuments, shall be brought to finish grade after finished paving.
- 25. 'Tracer Wire' shall be installed along the top of the pipe for all sections of the sewer line. The wire shall be solid copper AWG #10 with an insulated jacket.
- 26. Detectable warning tape shall be 3-inch wide GREEN color for with an overall minimum thickness of 6 mil and a solid aluminum foil core with minimum thickness of 3 mil. The solid foil shall be encased between two clear layers of 100% virgin polypropylene or polyethylene film. Warning Tape shall be permanently printed on both sides with a repeating warning "Caution: Sewer Pipe Below" at maximum interval of 2 feet. Warning Tape shall be placed 12 inch above the top of pipe.
- 27. All sanitary sewer mains shall be flushed, mandreled, air tested, and video inspected in accordance with Town's testing and retesting requirements.
- 28. Contractor shall submit video inspection CD/DVD to the Town for review and approval of the City Engineer prior to acceptance of the sewer main. The Contractor shall be responsible for repairing any defective sections observed in the video inspection to City
- 29. Trench, pipe bedding, and backfilling shall be in accordance with the Town Standard Details.
- 30. In areas where the existing road pavement is trenched for installation of the sewer main, contractor shall restore the pavement per Town of Los Altos Hills Standards. If the trench is

Town of Los Altos Hills Sanitary Sewer Construction Standards

more than 300 feet long, the street shall be slurry sealed. In the case where slurry seal is not suitable as determined by the Town, a fee may be required prior to permit issuance.

- 31. An as-built mylar plan, consists of locations of all sewer main and lateral wyes in the main trunk with reference to manholes, shall be submitted prior to acceptance of the
- 32. The Town is not responsible for cleaning private sewer laterals. The property owner is fully responsible for maintenance, repair, and replacement of the (a) lateral from the house to
- the main including wye connection at the main, (b) overflow, and (c) backflow devices. 33. All works to be done to the satisfaction of the City Engineer.
- 34. Include signature blocks, where applicable, for the following agencies:
 - A. Town of Los Altos Hills Public Works Director:

Approved as to compliance with Town of Los Altos Hills requirements Allen Chen, Public Works Director C.E. 67936 Date EXP. 06-30-2017 Town of Los Altos Hills

B. Purissima Hills Water District:

Approved by	
Purissima Hills Water District	Date

Town of Los Altos Hills Sanitary Sewer Construction Standards

PIPES AND FITTINGS

Polyvinyl Chloride Pipe (PVC)

1. All pipe and fittings shall conform to ASTM Specifications D3034, SDR 26.

- 2. All joints shall be a bell and spigot assembly with elastomeric sealing gaskets sealing gaskets shall meet the requirements of ASTM Specification D1869, Solvent Cement joins are not
- 3. All pipes entering or leaving a concrete structure shall have a rubber waterstop gasket attached to it. The waterstop gasket shall conform to the pipe manufacturer's specifications. The waterstop gasket shall be sealed firmly around the pipe exterior and be cast into the concrete structure.
- 4. All pipe joints shall be made using manufactured PVC couplings. Band type compression couplings are not permitted, except repairs. Fernco or equivalent.

High Density Polyethylene (HDPE)

- 1. The CONTRACTOR shall provide polyethylene pipe as specified. The pipe shall be made to diameter and tolerances in accordance with ASTM D 3035. The minimum ratio of orthogonal diameters prior to installation shall be 0.95. All pipe shall be made from virgin grade material. The pipe shall be of the diameter as shown on the plans and furnished complete with all fittings, and other appurtenances as necessary for a complete and functional system.
- 2. All pipe and fittings shall be DR 17 (unless otherwise indicated on the plans), Extra High Molecular Weight, High Density Polyethylene PE 3408, Cell Class PE345434C, D or E per ASTM D 3350. Pipe shall be co-extruded using a melt homogenizing/plasticating extruder and appropriate die.
- 3. The pipe and fittings materials shall meet the requirements for Type III, Class B, Category 5, Grade P34 material as described in ASTM D 1248. Pipe and fittings shall be made in conformance with ASTM F 714 and ASTM D 3261 as modified for the specified material. The pipe shall contain no recycled compound except that generated in the manufacturer's own plant from resin of the same specification from the same raw material pipe.

Town of Los Altos Hills Sanitary Sewer Construction Standards

A. Pipe, fittings, and joints shall meet or exceed the following physical properties:

PROPERTY	ASTM TEST METHOD	NOMINAL VALUE
Density, gm/cc	D 1505	0.955
Melt Index, gm/10 min.	D 1238-E	0.10
High Load Melt Index, gm/10 min.	D 1238-F	12.0
Tensile Strength @ Break, psi	D 638	4,500
Tensile strength @ Yield, psi	D 638	<3,200
Elongation, %	D 638	>800
Flexural Modulus, psi	D 790	136,000
Environmental Stress Cracking Resistance, F20 Hours (100 degree C)	D 1693	>5,000
Brittleness Temperature, degree	D 746	< -180
Melting Point, degree F	D 789	261
Vicat Softening Temp, degree F	D 1525	255
Hardness, Shore D	D 2240	66
Volume Resistivity, ohm-cm	D 991	2.6 X 10 (16 TH)
ASTM D 1248 Classification	D 1248	Type III Class C Category 5 Grade P34 345434C
Recommended Hydrostatic		800 psi @73.4° F
Design Stress		400 psi @140° F

B. Pipe Color:

- 1) The interior wall of all HDPE pipes to be used shall not be black or any dark. The inner wall shall be white, light green, or natural.
- 2) The outer wall shall be black, light green or natural. Orange, red, magenta or blue color are not acceptable.
- C. Pipe Markings:
- 1) Pipe shall be marked at 3-foot intervals or less with the manufacturer's name (or trade mark), the designation ASTM D3350 and ASTM 714, including the year of issue, the letters "PE" followed by the cell classification number of the raw material compound used, the nominal pipe size in inches, the dimensional ratio, and the manufacturer's code identifying the resin manufacturer, lot number, and date of manufacture. Pipe shall be color identified by stripes, a color shell, or solid color. The pipes shall be stored and handled in accordance with the manufacturer's recommendations and shall be less than two (2) years old at the time of installation.

Town of Los Altos Hills Sanitary Sewer Construction Standards

2) The average outside diameter and wall thickness of pipe and fittings shall conform to the table below when measured in accordance with ASTM D 2122.

Nominal	Nominal OD	Minimum Wall
Size (inches)	(inches)	Thickness DR17
		(inches)
4	4.5	0.265
6	6.625	0.390
8	8.625	0.507
10	10.75	0.632
12	12.75	0.750
14	14.00	0.824
16	16.00	0.941
18	18.00	1.059

- D. Pipe and Fittings shall be homogeneous throughout and free of:
- 1) Serious abrasion, cutting, or gouging of the outside surface extending to more than 10 percent of the wall thickness in depth
- 2) Cracks 3) Kinking (generally due to excessive or abrupt bending)
- 4) Flattening
- 5) Holes
- 6) Blisters
- 7) Other injurious defects
- E. Polyethylene Fittings
- 1) All polyethylene fittings shall have butt end outlets. Molded and fabricated fittings shall have a pressure rating equal to the pipe
- 2) Minimum pipe wall thickness for fitting butt outlets shall be equal to the pipe wall
- 3) The fittings shall be as uniform as commercially practicable in color, opacity, density, and other physical properties. Any pipe and fittings not meeting these criteria shall
- 4) Fittings shall be no older than 6 months from the date of manufacture to the date of shipment to the Town. All fittings shall be packaged in standard commercial cardboard boxes that provide protection from shipping injuries.
- 5) Fittings shall be molded except fittings larger than 12", which is allowed to be factory fabricated (unless molded fittings are available). Fabricated fittings shall be manufactured using Data Loggers recording heating iron face temperatures, fusion pressure and a graphic representation of the fusion cycle. The Data Logger printout

Town of Los Altos Hills Sanitary Sewer Construction Standards

shall be part of the required submittal for the fabricated fitting. Fabricated fittings shall be manufactured by ISCO or approved equal. All fabricated fittings must be approved by the Engineer prior to installation.

- 6) Fittings shall be marked with the following: ASTM D3261 (Butt type); manufacturer's name or trademark; material designation; date of manufacture or manufacturing code; size (including the sizing system used, such as IPS, CTS or OD). Where the fitting size does not allow complete marking, marking may be omitted in the following sequence: size, date of manufacture, material designation, manufacturer's name and trademark.
- F. Joints:
- 1) Pipe lengths shall be assembled in the field with butt-fused joints in accordance with ASTM F2620 and the pipe manufacturer's written instructions shall apply. Buttfused joints shall have internal bead projections of not more than 1/4 inch. Bead projections on the outside and inside of the pipe shall be removed. Joint strength shall be equal to or greater than the pipe and shall indicate a ductile rather than brittle fracture when tested.
- 2) Joint with Fusion Equipment: The fusion machine shall have hydraulic pressure control for fusing two pipe ends together and shall be equipped with gauges to monitor fusion pressures. The machine shall be equipped with an electric or gasoline engine powered facing unit to square and trim the pipe ends smooth and provide full surface contact with the heating plate. The heating plate on the fusion machine shall be electrically heated and thermostatically controlled with a temperature gauge and be capable of maintaining 500°F with a tolerance of 10°F. Fusion temperature shall be as recommended by the pipe manufacturer.
- 3) Where excavations for pipe installation are made between manholes, the pipe shall be joined by butt-fusion or per contractor's recommendations and as directed by the City Engineer.
- G. Where applicable, private lateral connections to HDPE mains shall be made using electrofusion wye saddles made of polyethylene pipe compound that meets the requirements of ASTM D 1248, Class C and suitable for fusion welding to polyethylene pipe.

Vitrified Clay Pipe (VCP)

- 1. Pipe and fitting shall be extra strength, unglazed, bell and spigot, conforming to the latest version of ASTM Specification C700.
- 2. Joints shall be a bell and spigot assembly with factory installed flexible compression type gaskets made of plasticized polyvinyl or polyurethane conforming to the latest revision of ASTM specifications C425.

Town of Los Altos Hills **Sanitary Sewer Construction Standards**

TESTING REQUIREMENTS

- 1. All references to the "Town" in these testing requirements shall mean the appropriate town of Los Altos Hills Public Works Department.
- 2. All required cleaning and testing of sanitary sewer mains and laterals shall be performed in the presence of a Town representative. Contractor shall notify the Town at least five (5) working days in advance of proposed testing dates.
- 3. All sanitary sewer mains being constructed shall be cleaned by means of a high speed jet rodder prior to testing.
- 4. Sanitary sewer systems shall be tested for tightness, alignment, cleanliness, and compliance with Town standards and requirements after completion of trench backfill and prior to paving and request for final inspection.
- 5. The Contractor shall take all necessary precautions to prevent any joint from drawing ground water while the pipeline and its appurtenances are being tested. Contractor shall, at own expense, correct any excess leakage and repair any damage to the pipe, structures, and appurtenances resulting from or caused by this test. Where the actual leakage exceeds the allowable leakage, the Contractor shall discover the cause and remedy it before the test is accepted. If the leakage is less than that allowed and leaks are observed, such leaks shall be repaired at the Town's direction.
- 6. Low-Pressure Air Test

All sanitary sewer mains being constructed shall pass a low-pressure air test. Each section of main shall be tested between successive manholes. The low-pressure test shall be conducted in the following manner:

- A. A compressed air supply shall be attached to an air fitting on the main and the air pressure within the line increased to five (5) pounds per square inch (PSI). After the air supply is securely turned off or disconnected, there shall be a two (2) minute waiting period before the actual test period begins to allow stabilization of air within the main.
- B. The Town may test pressure gauges for accuracy.
- C. In no case shall the air pressure within the line be less than 4 PSI at the beginning of the test period. Refer to the chart which follows for the length of the test period. The minimum length of test is four (4) minutes. The allowable air pressure loss during the test period shall be 0.5 PSI. A written record of the test shall be submitted to the Public Works Department by the contractor.



SIDEN(SE FA)
HILLS

 Ξ

HIILL

ALTO SEW STA A A TOW

REVISIONS JOB NO: 2201397 DATE: 03-12-21 NO SCALE SCALE:

SHEET NO:

DESIGN BY: TT

DRAWN BY: WA

Town of Los Altos Hills **Sanitary Sewer Construction Standards**

Nominal Pipe	Length of Line	Length of Test
Size	(feet)	(minutes)
(Inches)		
4	ALL	4
6	0 – 300	4
6	300 – 370	4 1/2
6	370 and Greater	5
8	0 – 170	4
8	170 – 210	4 1/2
8	210 – 250	5
8	250 – 290	5 1/2
8	290 and Greater	5 ¾
10	0-110	4
10	110 – 165	5
10	165 – 215	6
10	215 and greater	6 ¾

7. Deflection Testing

- A. Deflection testing of PVC sewer mains shall be performed after the placement of all trench backfill. Pipe deflection shall be tested by pulling by hand a go/no-go mandrel through the installed sections of sewer main.
- B. The Town shall observe mandrel testing. The Contractor shall give at least a five (5) working-day notice to the Engineer before commencing mandrel testing.
- C. The mandrel used shall have a minimum length equal to its diameter. The mandrel shall be constructed with a minimum of nine (9) ribs fabricated parallel to its longitudinal axis. Both the design of the mandrel and the fabricated mandrel itself shall be inspected by the Town well in advance of the deflection test.
- D. The mandrel diameter shall be 95% of the pipe's average inside diameter as defined by ASTM Specification D3034 for PVC.

mary is		
Diameter	Diameter	
(inches)	(inches)	
5.893	5.598	
7.891	7.497	
9.864	9.371	
	(inches) 5.893 7.891	

<u>Note</u>: Average inside diameter = average outside diameter -2(1.06)T, where T = minimum wall thickness as defined by ASTM Specification D3034.

Town of Los Altos Hills

Sanitary Sewer Construction Standards

condition shall be used to move the camera through the sewer line.

suitable device, and the accuracy shall be satisfactory to the Engineer.

communication between members of the crew.

permit proceeding with the television inspection

5) Television Inspection Logs

per NAASCO Standards.

7) Digital Video Recordings

the option of the Contractor.

6) Photographs

a. The camera shall be moved through the line in either direction at a uniform rate,

b. As the camera approaches a lateral connection or substantial defect, the camera

c. When manually operated winches are used to pull the television camera through the

d. The importance of accurate distance measurement is emphasized. The accuracy of the footage counter shall be checked by use of a walking meter, roll-a-tape, or other

e. In the event the section being televised has substantial flow entering the sewer

between manholes, such that inspection of the sewer is impaired, the Contractor shall

coordinate with the owner to have the flow temporarily stopped and/or reschedule

television inspection of the particular section to a time when the flow is reduced to

Prepare a written record that documents the location of the inspection, date and time of

the inspection, type and diameter of the pipe, direction of travel, and location and type of conditions observed including sanitary sewer laterals, roots, storm sewer connections, broken pipe, cracks, offset joints, sags, scale and corrosion, and other discernible features

The Contractor shall capture digital still images of all observations made during every

a. Prepare a digital visual and audio record of the inspection to document conditions observed. Recording playback shall be at the same speed in which it was recorded. Slow motion or stop-motion playback features may be supplied at

b. The Contractor shall have all recordings and necessary playback equipment

c. Digital recordings shall be labeled and individually numbered, beginning with the project name followed by Disc #01, #02 etc. Labels shall be typewritten

which shall be identified by the nomenclature used in the Drawings.

readily accessible for review by the Town during the project. Each segment of the submitted final recording shall begin and end at a manhole or cleanout,

stopping when necessary to permit proper documentation of the sewer condition. In no

case will the television camera be pulled at a speed great than 30 feet per minute.

Manual winches, power winches, TV cable, and powered rewinds or other devices that do not obstruct the camera view or interfere with proper documentation of the sewer

progress shall be halted and the camera lens panned to further view the lateral pipe and

connection (including looking up the lateral) or defect to thoroughly evaluate its

line, walkie talkie radios or other suitable means of communication shall be set up

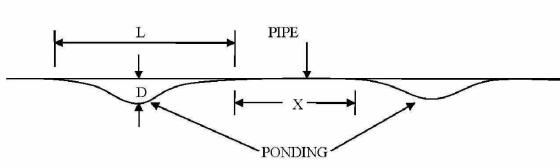
between the two manholes of the section being inspected to ensure good

HDPE, mandrel size shall be 95% of average inside diameter of pipe installed.

Town of Los Altos Hills **Sanitary Sewer Construction Standards**

F. Tolerance of sags in sanitary sewer pipe:

Pipe	Maximum	Maximum	Minimum Allowable
Diameter	Allowable Depth	Allowable Length	Distance (X) Between
(Inches)	(D) of Sag	(L) of Sag	Sags
4"	NONE	NONE	NONE
6"	NONE	NONE	NONE
8"	1/8"	4 FT	40 FT
10"	1/8"	6 FT	60 FT
12" and larger	1/8"	8 FT	80 FT



Any sags or ponding of water along the pipe will be repaired by excavation of the pipe, realigning and compacting the subgrade or relaying the non-conforming section of pipe if necessary.

- 1) The maximum allowable depth of ponding water in sewer pipes: 1/8".
- 2) Ponding water in excess of the allowable tolerance will be cause for rejection.
- 3) Any defects in the pipe or construction method revealed shall be corrected and retelevised for Town's review, approval, and acceptance.

8. Retesting

Each sanitary sewer pipe shall be retested at a date between eighteen (18) months and twenty-one (21) months from the date of acceptance of that pipe by the Contractor. The line shall be cleaned, mandrelled and televised in the manner specified herein for newly installed pipe. If the retesting reveals any defects due to faulty materials or workmanship, the Contractor shall repair or replace the defective structures to meet all requirements of Town standards including the testing criteria required for acceptance by the Town. Television inspection shall be provided by the Town and be reimbursed by Contractor's remaining deposit. All costs associated with retesting and the correction of defects shall be the responsibility of the Contractor.

Additional testing requirements and/or procedures may be required by the City Engineer and/or his representative. All testing and retesting shall be done to the satisfaction of the

Town of Los Altos Hills Sanitary Sewer Construction Standards

9. Cleaning and Video Inspection

A. Equipment

1) Cleaning:

- a. Hydraulically propelled equipment such as root saws or rotating chain flails shall be used for root removal.
- b. Hydraulically propelled equipment such as sewer balls or movable dam shall not be used.
- c. High-Velocity Hydraulic (Hydro-Cleaning) Equipment: High-velocity sewer cleaning equipment shall have a minimum working pressure of 1,000 psi at a 30 gpm rate. The nozzles shall be capable of producing a scouring action in the lines designated to be cleaned to remove debris and sand from the flow line. The equipment shall carry a nominal 800 gallon minimum water tank and have a minimum of 650 feet of high pressure hose.
- d. Vacuum truck/loader: vacuum loader shall be a 3 axle, 27" mercury (highvacuum unit) with a positive displacement blower producing a minimum of 3,500 CFM air flow, 8" suction tubes, and 16 cubic yards capacity.

2) The equipment shall have an operation length of at least 800 feet

3) Video Inspection

- a. The color television camera to be used for the inspection shall be one specifically designed and constructed for operation in connection with sewer inspection. It shall be operative in 100 percent humidity conditions and have a 360-degree radial view rotating head.
- b. The camera head shall be capable of rotating to view up lateral connections and
- c. Lighting and camera quality shall be suitable to allow a clear in-focus picture of a minimum of six linear feet of the entire inside periphery of the sewer pipe. Lighting for the camera shall minimize reflective glare.
- d. To insure peak picture quality throughout all conditions encountered during the survey, a variable intensity control of the camera lights and remote control adjustments for focus and iris shall be located at the monitoring station.
- e. Focal distance shall be adjustable through a range of from six inches to infinity. Continuously displayed on the monitor shall be the date of the survey, number designation of the upstream and downstream manholes corresponding to the line section being surveyed, and a continuous forward and reverse readout of the camera distance from the manhole of reference.
- f. The remote reading footage counter shall be accurate to two-tenths of a foot. The color camera, television monitor and other components shall be capable of producing a minimum 500 line resolution color video picture. The equipment shall have a minimum operation length of at least 800 feet.

One set of cleaning equipment, one vacuum loader, and a minimum of 300 linear feet of flexible hose for vacuuming, shall be at the job site at all time.

B. Procedure

1) Cleaning

All sludge, dirt, sand, rocks, grease, roots, and other solid or semisolid material resulting from the cleaning operation shall be removed at the downstream manhole of the section being cleaned. Passing material from manhole to manhole will not permitted.

Town of Los Altos Hills

Sanitary Sewer Construction Standards

the conditions of lines at the time the work commences.

a. The designated sewer sections shall be cleaned using hydraulically propelled,

high-velocity jet equipment. Selection of the equipment used shall be based on

manhole, the equipment shall be set up at the destination manhole and cleaning

b. The equipment shall be capable of removing dirt, grease, rocks, sand, roots and

d. A minimum of one operator and two laborers shall be at the job site at all time.

other materials and obstructions from the sewer lines and manholes.

(Contractor shall be responsible for all cost for obtaining water).

c. If cleaning of the entire section cannot be successfully performed from one

3) Disposal of Material

2) Material Removal

- a. All solids or semisolids resulting from the cleaning operations shall be removed from the site and disposed outside of the Town limits. Contractor shall comply with all federal, state, and local regulations regarding disposal of debris outside Town limits. However, the Contractor may elect to provide and install a temporary solids transfer facility (including phase separator with cover, filter screens, and ramp).
- b. The temporary facility may be staged within the Towns property adjacent to the intersection of Purissima Road and Elena Road.
- c. Liquid in the phase separator shall be drained directly to the Town sanitary sewer manhole adjacent to the transfer facility.
- d. The Contractor shall be responsible for cleaning and maintenance of the area and shall ensure any spilled materials are flushed into the sanitary sewer
- e. A containment system, approved by the Town's Engineer, shall be installed to keep debris from entering the storm drain system. It is the responsibility of the Contractor to keep odors to a minimum by removing/disposing of the debris on a regular basis, covering the debris box during off hours, and cleaning the area around the facility on a daily basis. At a minimum, debris boxes shall be emptied and replaced once a week.
- f. No separate payment will be made for disposal of debris and all costs therefore shall be included in the contract items of work.

4) Video Operation

 Ξ

SIDEN(ISE FA)
HILLS
RNIA (国 CO· IE 47

> HIILL

TOW 2201397

REVISIONS JOB NO: DATE: 03-12-21 NO SCALE SCALE: DESIGN BY: TT

DRAWN BY: WA SHEET NO:

03 OF 07 SHEETS

Town of Los Altos Hills Sanitary Sewer Construction Standards

and include project title, dates(s) of recording, disc number, and segment (including MH#).

Town of Los Altos Hills **Sanitary Sewer Construction Standards**

- d. Recordings shall include the following:
- i. Data View Before the Inspection: Location, Date and time of video inspection, type and diameter of the pipe, direction of travel.
- ii. Data View During Inspection: Location, date and current distance along reach.
- iii. Audio shall include:
- Date and time of video inspection
- Verbal confirmation of upstream and downstream manhole numbers
- Verbal description of pipe size, type and pipe joint length
- Verbal description of location of each defect
- Verbal description of location of each service connection point

- a. Prepare a written report identifying the length of each segment of pipeline measured from centerline of manhole to centerline of manhole, from cleanout to centerline of manhole, or cleanout to cleanout.
- b. If a difference of more than ten feet is found from the distance shown on the Drawings, notify the Town's Representative and re-measure the distance in his/her presence.

4 INCH SANITARY SEWER EXTENSION PROFILE SCALE: 1" = 20' HORIZ & VERT

BEFORE CONSTRUCTING SS-LAT, VERIFY WITH LEA & BRAZE: . TOP OF PIPE ELEV. OF 8" SS AT CONNECTION POINT 2. ENSURE 2% MIN SLOPE OF 4" SS LAT

- A SEPARATE PERMIT IS REQUIRED FOR ANY AND ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY. THE CONTRACTOR SHALL OBTAIN AN APPROVED STREET WORK (ENCROACHMENT PERMIT) PERMIT FROM THE PUBLIC WORKS DEPARTMENT PRIOR TO THE
- THE PROPERTY OWNER SHALL INFORM THE TOWN OF ANY DAMAGE TO THE PUBLIC IMPROVEMENT AND SHALL REPAIR ANY
- SAWCUT AND INSTALL SEWER PER TOWN STANDARDS. BACKFILL TRENCHES PER STANDARD DETAILS UT-1 & UT-2 ON SHEET
- ALL UTILITY CROSSING SHALL BE POTHOLED AND VERIFIED
- STUBOUT LOCATIONS SHALL BE MARKED BY 4" X 4' X 4" REDWOOD POST (PAINTED WHITE), SET 2' INTO GROUND, AND MARKED "S" BY ROUTING OR BURNING AS DESCRIBED IN TOWN'S STD DETAIL SS-5 ON SHEET C-3.0.

NOTE; MAINTAIN A MIN. OF 12" VERTICAL CLEARANCE BETWEEN (N) SEWER AND ALL (E) UTILITIES. CONCRETE ENCASE ALL ÙTILITIES IF CLEARANCE BETWEEN UTILITIES IS LESS THAN 12".

NOTE:

FOR CONSTRUCTION STAKING SCHEDULING OR QUOTATIONS PLEASE CONTACT ALEX ABAYA AT LEA & BRAZE ENGINEERING (510)887-4086 EXT 116. aabaya@leabraze.com





GLER RESIDENCE
4 SUNRISE FARM,
S ALTOS HILLS,
CALIFORNIA
CALIFORNIA 1EG 474 LOS

> EWE] SITERA AN LA S

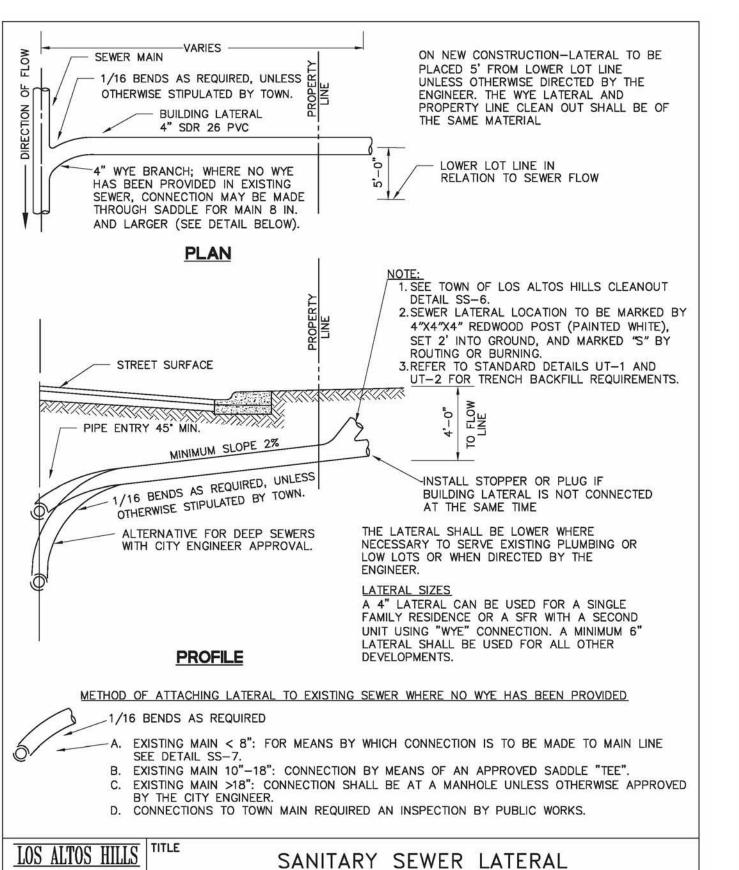
REVISIONS

JOB NO: 2201397 DATE: 03-12-21 SCALE: AS NOTED DESIGN BY: TT

WA

04 OF 07 SHEETS

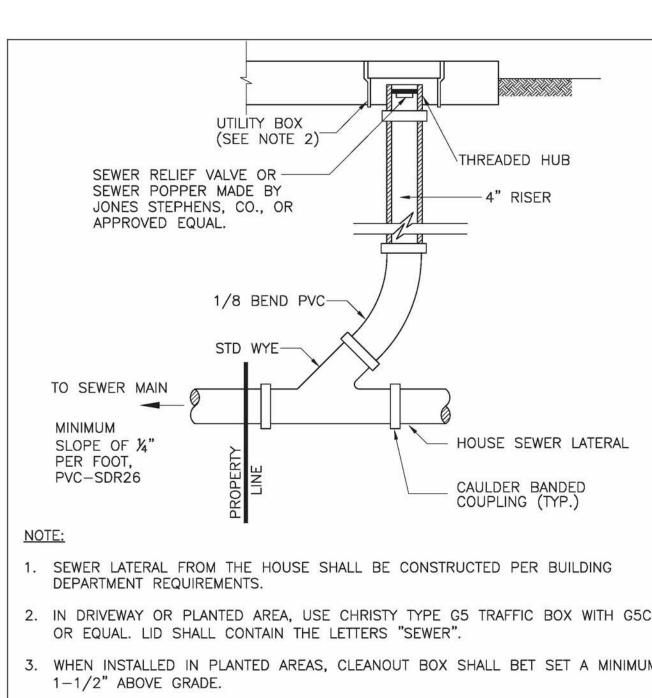
DRAWN BY:



ADOPTED BY CITY COUNCIL DATE:

1/13/2011

CALIFORNIA 26379 FREMONT ROAD, LOS ALTOS HILLS, CA 94022 · Phone: (650) 941-7222

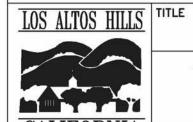


2. IN DRIVEWAY OR PLANTED AREA, USE CHRISTY TYPE G5 TRAFFIC BOX WITH G5C LID

3. WHEN INSTALLED IN PLANTED AREAS, CLEANOUT BOX SHALL BET SET A MINIMUM OF

4. OWNER IS RESPONSIBLE FOR MAINTENANCE, REPAIR, AND REPLACE OF LATERAL, FROM THE BUILDUNG TO THE MAIN CONNECTION INCLUDING THE WYE AT THE MAIN, SEWER RELIEVE VALVE AND BACKFLOW PREVENTOR.

5. INSTALL BACKFLOW PREVENTOR "CLEAN CHECK" EXTENDABLE BACKWATER VALVE, OR APPROVED EQUAL, UPSTREAM OF PROPERTY LINE CLEANOUT



STANDARD DETAIL

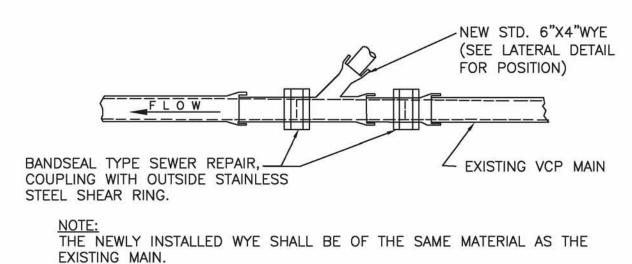
SCALE: NONE

DATE: 1/6/2011

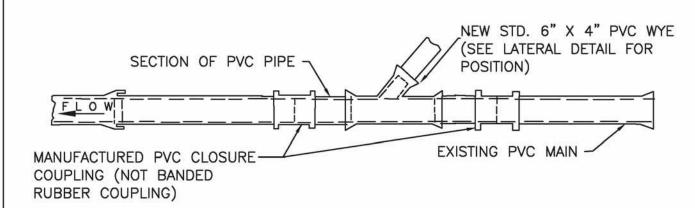
VERTICAL SEWER LATERAL CLEANOUT

SCALE: NONE STANDARD DETAIL ADOPTED BY CITY COUNCIL DATE: DATE: 1/6/2011 1/13/2011

CALIFORNIA 26379 FREMONT ROAD, LOS ALTOS HILLS, CA 94022 · Phone: (650) 941-7222



VITRIFIED CLAY (VCP)



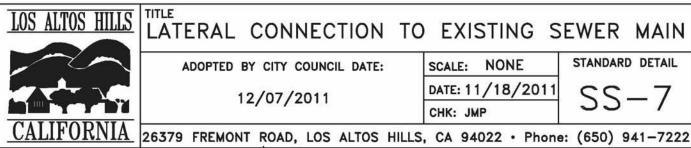
ALL PVC, PIPE AND FITTINGS SHALL BE SDR 26 AND SHALL HAVE RUBBER GASKETED JOINTS. SOLVENT WELDED JOINTS SHALL NOT BE ALLOWED

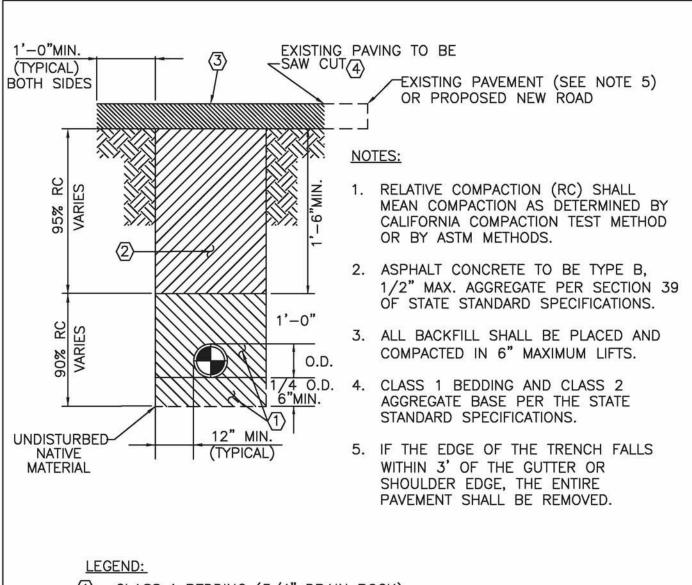
POLYVINYL CHLORIDE PIPE (PVC)

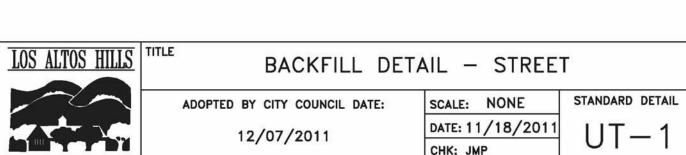
LATERAL CONNECTION INSTALLATION ON NEWLY INSTALLED PIPE WILL BE AS DIRECTED BY THE DEPARTMENT OF PUBLIC WORKS.

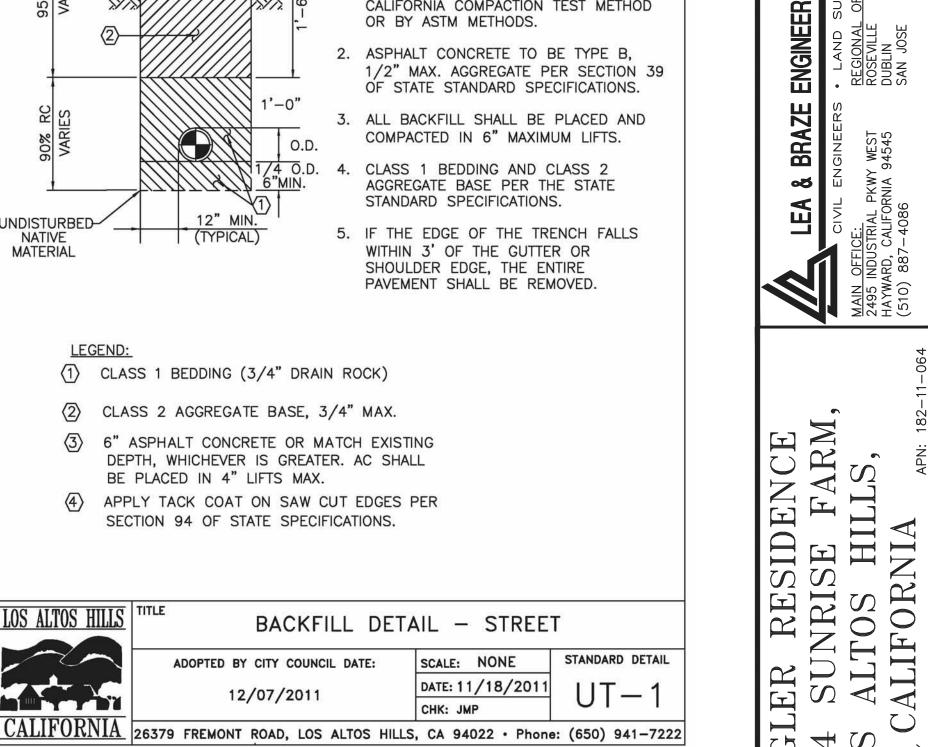
2. IF THE EXISTING MAIN IS HDPE, LATERAL CONNECTION SHALL BE MADE BY HEAT FUSION. THE MATERIAL OF THE LATERAL BETWEEN THE MAIN AND PROPERTY LINE CLEANOUT SHALL BE THE SAME AS THE EXISTING MAIN.

STANDARD DETAIL











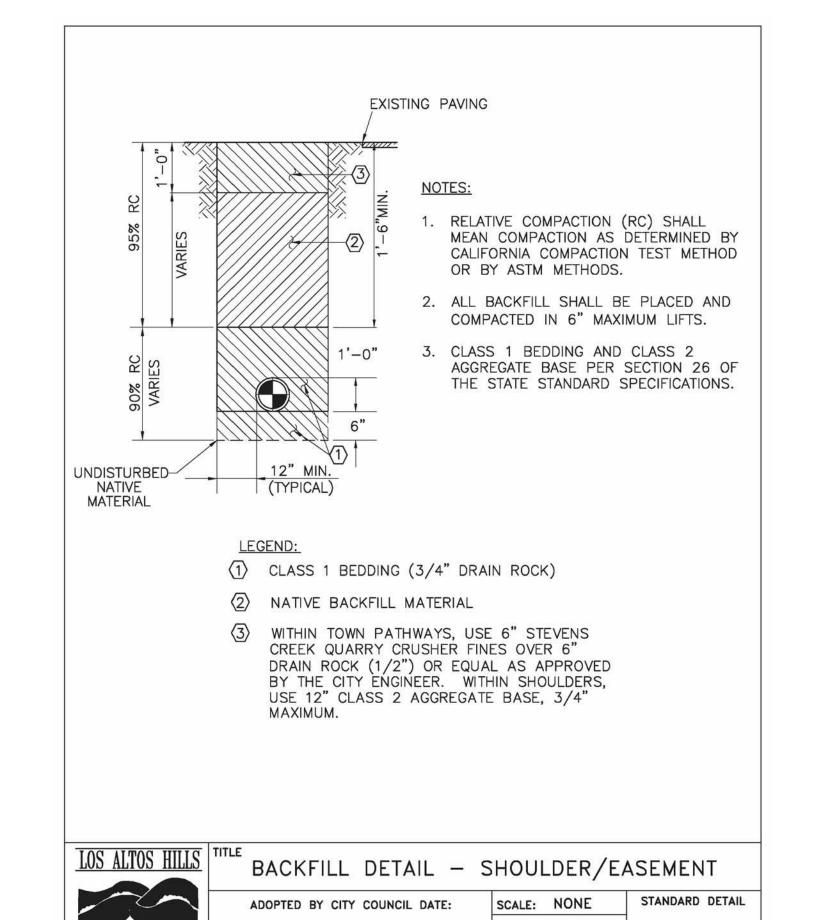
CE

R RESUNRIS

_		-
_		1
_		-
REVISIONS		BY
JOB NO:	2201	397
DATE:	03-1	2-21
SCALE:	NTS	
DESIGN BY:	TT	
DRAWN BY	WA	

05 OF 07 SHEETS

SHEET NO:



1/13/2011

CALIFORNIA 26379 FREMONT ROAD, LOS ALTOS HILLS, CA 94022 · Phone: (650) 941-7222

PURPOSE

THE PURPOSE OF THIS TEMPORARY TRAFFIC CONTROL (TTC) PLAN IS TO PROVIDE SAFE AND ADEQUATE MOVEMENT OF VEHICULAR, BICYCLE, EQUESTRIAN, AND PEDESTRIAN TRAFFIC THROUGH AND AROUND CONSTRUCTION OPERATIONS TO RESIDENTS ALONG WOOD ACRES ROAD. THE TTC PLAN DESCRIBES TTC MEASURES TO BE USED FOR FACILITATING ROAD USERS THROUGH THE WORK ZONE.

ALL GENERAL NOTES, SHEET NOTES, AND LEGEND NOTES FOUND IN THESE DOCUMENTS SHALL APPLY TYPICALLY THROUGHOUT. IF INCONSISTENCIES ARE FOUND IN THE VARIOUS NOTATIONS, NOTIFY THE ENGINEER IMMEDIATELY IN WRITING REQUESTING CLARIFICATION.

THESE DRAWINGS AND THEIR CONTENT ARE AND SHALL REMAIN THE PROPERTY OF LEA AND BRAZE ENGINEERING, INC. WHETHER THE PROJECT FOR WHICH THEY ARE PREPARED IS EXECUTED OR NOT. THEY ARE NOT TO BE USED BY ANY PERSONS ON OTHER PROJECTS OR EXTENSIONS OF THE PROJECT EXCEPT BY AGREEMENT IN WRITING AND WITH APPROPRIATE COMPENSATION TO THE ENGINEER.

ALL WORK SHALL COMPLY WITH APPLICABLE CODES AND TRADE STANDARDS WHICH GOVERN EACH PHASE OF WORK INCLUDING, BUT NOT LIMITED TO, CALIFORNIA MECHANICAL CODE, CALIFORNIA PLUMBING CODE, CALIFORNIA ELECTRICAL CODE, CALIFORNIA FIRE CODE, CALTRANS STANDARDS AND SPECIFICATIONS, AND ALL APPLICABLE STATE AND/OR LOCAL CODES AND/OR LEGISLATION.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR AND ALL SUBCONTRACTORS TO CHECK AND VERIFY ALL CONDITIONS, DIMENSIONS, LINES AND LEVELS INDICATED. PROPER FIT AND ATTACHMENT OF ALL PARTS IS REQUIRED. SHOULD THERE BE ANY DISCREPANCIES, IMMEDIATELY NOTIFY THE ENGINEER FOR CORRECTION OR ADJUSTMENT THE EVENT OF FAILURE TO DO SO, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTION OF ANY ERROR.

ALL DIMENSIONS AND CONDITIONS SHALL BE CHECKED AND VERIFIED ON THE JOB BY EACH SUBCONTRACTOR BEFORE HE/SHE BEGINS HIS/HER WORK. ANY ERRORS, OMISSION, OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER/CONTRACTOR BEFORE CONSTRUCTION BEGINS.

COMMENCEMENT OF WORK BY THE CONTRACTOR AND/OR ANY SUBCONTRACTOR SHALL INDICATE KNOWLEDGE AND ACCEPTANCE OF ALL CONDITIONS DESCRIBED IN THESE CONSTRUCTION DOCUMENTS, OR EXISTING ON SITE, WHICH COULD AFFECT THEIR WORK.

WORK SEQUENCE

IN THE EVENT ANY SPECIAL SEQUENCING OF THE WORK IS REQUIRED BY THE OWNER OR THE CONTRACTOR, THE CONTRACTOR SHALL ARRANGE A CONFERENCE BEFORE ANY SUCH WORK IS BEGUN.

SITE EXAMINATION: THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL THOROUGHLY EXAMINE THE SITE AND FAMILIARIZE HIM/HERSELF WITH THE CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED. THE CONTRACTOR SHALL VERIFY AT THE SITE ALL MEASUREMENTS AFFECTING HIS/HER WORK AND SHALL BE RESPONSIBLE FOR THE CORRECTIONS OF THE SAME. NO EXTRA COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR EXPENSES DUE TO HIS/HER NEGLECT TO EXAMINE, OR FAILURE TO DISCOVER, CONDITIONS WHICH AFFECT HIS/HER WORK.

LEA AND BRAZE ENGINEERING, INC. EXPRESSLY RESERVES ITS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THESE PLANS ARE NOT TO BE REPRODUCED, CHANGED OR COPIED IN ANY FORM OR MANNER WHATSOEVER, NOR ARE THEY TO BE ASSIGNED TO A THIRD PARTY WITHOUT FIRST OBTAINING THE WRITTEN PERMISSION AND CONSENT OF LEA AND BRAZE ENGINEERING, INC. IN THE EVENT OF UNAUTHORIZED REUSE OF THESE PLANS BY A THIRD PARTY, THE THIRD PARTY SHALL HOLD HARMLESS LEA AND BRAZE ENGINEERING, INC.

CONSTRUCTION IS ALWAYS LESS THAN PERFECT SINCE PROJECTS REQUIRE THE COORDINATION AND INSTALLATION OF MANY INDIVIDUAL COMPONENTS BY VARIOUS CONSTRUCTION INDUSTRY TRADES. THESE DOCUMENTS CANNOT PORTRAY ALL COMPONENTS OR ASSEMBLIES EXACTLY. IT IS THE INTENTION OF THESE ENGINEERING DOCUMENTS THAT THEY REPRESENT A REASONABLE STANDARD OF CARE IN THEIR CONTENT. IT IS ALSO PRESUMED BY THESE DOCUMENTS THAT CONSTRUCTION REVIEW SERVICES WILL BE PROVIDED BY THE ENGINEER. SHOULD THE OWNER NOT RETAIN THE ENGINEER TO PROVIDE SUCH SERVICES, OR SHOULD HE/SHE RETAIN THE ENGINEER TO PROVIDE ONLY PARTIAL OR LIMITED SERVICES. THEN IT SHALL BE THE OWNER'S AND CONTRACTOR'S RESPONSIBILITY TO FULLY RECOGNIZE AND PROVIDE THAT STANDARD OF CARE.

IF THE OWNER OR CONTRACTOR OBSERVES OR OTHERWISE BECOMES AWARE OF ANY FAULT OR DEFECT IN THE PROJECT OR NONCONFORMANCE WITH THE CONTRACT DOCUMENTS, PROMPT WRITTEN NOTICE THEREOF SHALL BE GIVEN BY THE OWNER AND/OR CONTRACTOR TO THE ENGINEER.

THE ENGINEER SHALL NOT HAVE CONTROL OF OR CHARGE OF AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS. METHODS. TECHNIQUES. SEQUENCES. OR PROCEDURES. OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK, FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS, OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK, OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

NOTE: FLAGGERS SHALL STOP BICYCLISTS / PEDESTRIANS AND ALLOW MOVEMENT ONLY WHEN NO VEHICULAR TRAFFIC IS PRESENT. FLAGGERS SHALL STOP VEHICULAR TRAFFIC WHEN BICYCLISTS / PEDESTRIANS ARE MOVING THROUGH THE CONSTRUCTION ZONE.

TRAFFIC CONTROL:

THE CONTRACTOR SHALL PROVIDE FOR SAFE MOVEMENT OF VEHICULAR, BICYCLE, EQUESTRIAN, AND PEDESTRIAN TRAFFIC THROUGH AND AROUND CONSTRUCTION OPERATIONS. TRAFFIC CONTROL REQUIREMENTS SET FORTH HEREIN ARE THE MINIMUM REQUIREMENTS IMPOSED. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR PROVIDING ALL PROTECTIVE MEASURES NECESSARY.

2. TRAFFIC CONTROL PLANS:

PROPOSED TRAFFIC CONTROL MEASURES FOR VEHICLES, BICYCLES, EQUESTRIANS, AND PEDESTRIANS. THE PLANS SHALL BE GENERALLY IN ACCORDANCE WITH THE ILLUSTRATION INCLUDED IN THE MANUAL OF TRAFFIC CONTROL.

A. SHALL BE PREPARED BY A LICENSED TRAFFIC ENGINEER TO CLEARLY DESCRIBE

- B.SHALL PROVIDE A DETAILED APPROACH FOR DETOURS AND TO CONTROL TRAFFIC THROUGH THE CONSTRUCTION ZONE,
- C.SHALL CONSIST OF SCALED DRAWINGS FOR EACH SITUATION ANTICIPATED TO BE ENCOUNTERED, I.E. INTERSECTIONS, MID-BLOCK (EACH DURING WORKING AND NON-WORKING HOURS), ETC.
- D.SHALL SHOW SIGNS, TRAFFIC CONTROL DEVICES AND FLAGGERS AS REQUIRED.
- E.SHALL CONFORM TO CALTRANS AND TOWN STANDARDS,
- F. ARE SUBJECT TO REVIEW AND APPROVAL OF THE CITY ENGINEER BEFORE CONSTRUCTION BEGINS.

3. TRAFFIC CONTROL DEVICES:

A. GENERAL -

- 1)PROVIDE TRAFFIC CONTROL DEVICES IN SUFFICIENT QUANTITIES AND TYPES AS REQUIRED TO PROVIDE SAFE AND ADEQUATE TRAFFIC CONTROL.
- 2) DURING HOURS OF DARKNESS, APPROVED LIGHTS AND/OR FLARES SHALL BE INCLUDED, IN PROPER WORKING ORDER, TO ILLUMINATE SIGNS AND HAZARDS AND ALERT APPROACHING TRAFFIC.
- 3) PROVIDE AND MAINTAIN BARRICADES ALONG ALL OPEN TRENCHES IN CONTACT WITH TRAFFIC.
- 4) NO WORK MAY BEGIN ON ANY DAY OR AT ANY TIME BEFORE TRAFFIC CONTROL DEVICES HAVE BEEN PLACED, TEST DRIVEN AND, IF REQUIRED, ADJUSTED AND REVISED.
- 5) CONTRACTOR SHALL INSTALL ADDITIONAL TRAFFIC CONTROL MEASURES AS REQUIRED BY THE CITY ENGINEER OR HIS REPRESENTATIVE.

B.CONES OR DELINEATORS -

- 1)CONES OR DELINEATORS SHALL CONSIST OF CYLINDRICAL OR CONE SHAPED PLASTIC DEVICES, WHICH SHALL BE 18-INCH TO 48-INCH IN HEIGHT.
- 2) CONES OR DELINEATORS SHALL HAVE A FLEXIBLE BASE OF SUITABLE WEIGHT, WHICH WILL ENSURE STABILITY.
- 3) CONES USED DURING HOURS OF DARKNESS SHALL BE INTERNALLY ILLUMINATED OR REFLECTORIZED MEETING THE REQUIREMENTS OF THE MANUAL OF TRAFFIC CONTROLS.

C.BARRICADES -

- 1)BARRICADES SHALL BE TYPE I, TYPE II OR TYPE III BARRICADES AS SET FORTH IN THE MANUAL OF TRAFFIC CONTROLS.
- 2) BARRICADES USED DURING HOURS OF DARKNESS SHALL BE EQUIPPED WITH FLASHERS.
- D.ELECTRONIC MESSAGE BOARDS TO BE PLACED 14 DAYS PRIOR TO START OF

E.PLACEMENT -

- 1)PLACE ALL TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE MANUAL OF TRAFFIC CONTROLS AND FAVORABLY REVIEWED TRAFFIC CONTROL PLAN.
- 2) ADJUST LOCATIONS OF DEVICES TO SUIT THE CONDITIONS AND CIRCUMSTANCES OF EACH DETOUR SITUATION. IN ALL CASES, PLACE SIGNS TO MOST EFFECTIVELY CONVEY THEIR MESSAGES TO APPROACHING TRAFFIC.

F. TEST DRIVE OF DETOUR -

- 1)IMMEDIATELY AFTER TRAFFIC CONTROL DEVICES HAVE BEEN PLACED, THE DETOUR SHALL BE TEST DRIVEN BY THE CONTRACTOR'S REPRESENTATIVE.
- 2) TEST DRIVE SHALL INCLUDE APPROACH TO THE DETOUR FROM EACH POSSIBLE DIRECTION AND TRAVERSING FULL LENGTH OF EACH DETOUR ROUTE.
- 3) THE CONTRACTOR SHALL ADJUST AND REVISE ALL TRAFFIC CONTROL DEVICES AS DETERMINED TO BE REQUIRED BY TEST DRIVE THROUGH AND SHALL REPEAT TEST DRIVE IF DETERMINED NECESSARY BY THE CITY ENGINEER.
- 4) THE CONTRACTOR SHALL PROVIDE ADDITIONAL TRAFFIC CONTROL DEVICES IF REQUIRED TO MAINTAIN FLOW OF TRAFFIC THROUGH CONSTRUCTION OPERATION.

G.MAINTENANCE OF DEVICES -

- 1)THE CONTRACTOR SHALL MAINTAIN ALL TRAFFIC CONTROL DEVICES, AT PROPER LOCATIONS AND IN PROPER WORKING ORDER, AT ALL TIMES DURING CONSTRUCTION OPERATION AND WHENEVER A HAZARD RESULTING FROM CONTRACTOR'S OPERATION EXISTS.
- THE CONTRACTOR SHALL ADJUST AND REVISE TRAFFIC CONTROL DEVICES. PLACEMENT, ETC., TO SUIT CHANGING CONDITIONS AROUND CONSTRUCTION OPERATIONS.

H. REMOVAL OF DEVICES -

- 1)TRAFFIC CONTROL DEVICE SHALL REMAIN IN PLACE AT ALL TIMES REQUIRED TO ALERT APPROACHING TRAFFIC OF UPCOMING HAZARDS.
- AFTER HAZARD HAS BEEN REMOVED, REMOVE ALL TRAFFIC CONTROL DEVICES. REMOVE SIGNS OR COVER THEIR MESSAGES.

4. FLAGGERS:

A. GENERAL -

- 1)THE CONTRACTOR SHALL EMPLOY FLAGGERS AS REQUIRED FOR EACH SPECIFIC
- 2) THE CONTRACTOR SHALL EMPLOY FLAGGERS AT ALL LOCATIONS ON A CONSTRUCTION SITE WHERE BARRICADES AND WARNING SIGNS CANNOT CONTROL THE MOVING TRAFFIC.
- B.PLACEMENT WHERE FLAGGERS ARE REQUIRED, THEY SHALL BE LOGICALLY PLACED IN RELATION TO THE EQUIPMENT OR OPERATION SO AS TO GIVE ADEQUATE WARNING AND SHALL BE PLACED APPROXIMATELY 100 FEET AHEAD OF IMPACT POINT.

C.WARNING SIGNS -

- 1)PLACE A WARNING SIGN AHEAD OF THE FLAGGER READING: "FLAGGER AHEAD." THE DISTANCE BETWEEN THE SIGN AND THE FLAGGER SHALL BE BASED ON THE AVERAGE TRAFFIC SPEED.
- 2) DURING HOURS OF DARKNESS, ILLUMINATE FLAGGER STATIONS SUCH THAT THE FLAGGER WILL BE CLEARLY VISIBLE TO APPROACHING TRAFFIC. LIGHTS FOR ILLUMINATING THE FLAGGER STATION SHALL BE REVIEWED AND APPROVED BY THE CITY ENGINEER.

D.EQUIPMENT -

1)PROVIDE FLAGGER WITH A RED OR ORANGE WARNING GARMENT WHEN

FLAGGING. PROVIDE FLAGGERS WITH APPROVED HAND SIGNS AND TWO-WAY RADIOS FOR COMMUNICATION.

2) WHEN FLAGGING DURING HOURS OF DARKNESS, THE FLAGGER SHALL SIGNAL WITH A RED LIGHT OR FLARE AND SHALL HAVE A BELT AND SUSPENDER HARNESS OUTSIDE HIS GARMENT FITTED WITH REFLECTORS OR MADE FROM REFLECTORIZED CLOTH, UNLESS THE GARMENT IS WELL REFLECTORIZED IN ONE OF THESE WAYS.

5. ACCESS TO PRIVATE PROPERTY

- A. GENERAL THE CONTRACTOR SHALL SCHEDULE OPERATIONS TO MINIMIZE DISRUPTION OF ACCESS TO PRIVATE PROPERTIES.
- B.NOTICE TO RESIDENTS PRIOR TO BLOCKING ACCESS TO ANY PRIVATE DRIVEWAY OR PARKING LOT ENTRANCE, THE CONTRACTOR SHALL NOTIFY THE RESIDENT OR BUSINESS OWNER OR TENANT OF PENDING CLOSURE AND ALLOW RESIDENT TO REMOVE VEHICLES.
- C.NIGHTS DURING NON-WORKING HOURS NO DRIVEWAY, HOUSE OR PARKING LOT SHALL BE DENIED ACCESS TO A PUBLIC ROADWAY.

6. NOTICE TO AGENCIES:

A. THE CONTRACTOR SHALL NOTIFY IN WRITING ALL AGENCIES HAVING JURISDICTION AT LEAST FORTY-EIGHT (48) HOURS, EXCLUDING HOLIDAYS AND WEEKENDS, PRIOR TO INSTITUTING ANY LANE CLOSURE OR DETOUR. AT THE END OF EACH DAY'S WORK, THE CONTRACTOR SHALL INFORM THE AMBULANCE SERVICE, POLICE, AND FIRE DEPARTMENTS OF THE STATUS OF ALL DETOURS AND/OR LANE OR ROAD CLOSURES THAT WILL BE IN EFFECT THE NEXT DAY.

B.LIST OF AGENCIES:

- 1)TOWN OF LOS ALTOS HILLS.
- COUNTY FIRE & POLICE DEPARTMENT.
- U.S. POSTAL SERVICE.
- AMBULANCE SERVICES.
- GREEN WASTE RECOVERY.

7. EMERGENCY VEHICLE ACCESS THROUGH DETOURS:

- A. DURING CONSTRUCTION IN OR ADJACENT TO ROADWAYS IN THE PROJECT SITE. CONTRACTOR SHALL MAINTAIN AT LEAST ONE LANE OPEN IN EACH DIRECTION OF THE ROAD TO ALLOW EMERGENCY VEHICLE ACCESS FOR POLICE, FIRE AND AMBULANCE TO THE PROJECT VICINITY.
- B.DURING ALL DETOURS AND/OR STREET CLOSURES THE CONTRACTOR SHALL PROVIDE FOR MOVEMENT OF EMERGENCY VEHICLES THROUGH THE WORK AREA.
- C.IT IS ESSENTIAL THAT THE CONTRACTOR'S WORK AND EQUIPMENT DOES NOT IMPEDE EGRESS FROM ANY FIRE OR POLICE STATION TO OTHER AREA OF THEIR SERVICE AREA.

8. DIVERTING TRAFFIC:

A. DIVERTING PEDESTRIAN, EQUESTRIAN, AND BICYCLIST TRAFFIC:

- 1) WHENEVER CONSTRUCTION OPERATIONS OBSTRUCT THE FLOW OF PEDESTRIAN, EQUESTRIAN, AND/OR BICYCLE TRAFFIC OR PRESENT A HAZARD TO PEDESTRIANS, HORSES, AND BICYCLISTS, THE CONTRACTOR SHALL TAKE APPROPRIATE ACTION TO PROTECT AND SEPARATE THEM FROM THE WORK
- 2) SUCH ACTION MAY INCLUDE PLACEMENT OF BARRICADES BETWEEN PEDESTRIANS, HORSES, AND BICYCLISTS AND WORK AREAS, PLACEMENT OF WARNING SIGNS, AND PROVISION OF PERSONNEL AS REQUIRED TO PROTECT PEDESTRIANS. HORSES. CYCLISTS AS CONDITIONS OF WARRANT.

B.DIVERTING VEHICULAR TRAFFIC:

1) WHENEVER CONSTRUCTION OPERATIONS OBSTRUCT THE FLOW OF VEHICULAR TRAFFIC OR PRESENT A HAZARD TO VEHICLES OPERATING IN THE VICINITY OF CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL TAKE APPROPRIATE ACTION TO WARN, DETOUR AND OTHERWISE PROTECT APPROACHING DRIVERS AND VEHICLES.

9. PARKING RESTRICTIONS:

A. GENERAL - THE CONTRACTOR SHALL POST APPROVED "NO PARKING" SIGNS AT ALL LOCATION NECESSARY TO ESTABLISH WORK AREAS AND DETOUR TRAFFIC B.SIGNS - SIGNS SHALL BE PLACED AT LEAST 24 HOURS IN ADVANCE OR

C.CONTRACTOR SHALL PROVIDE HIS OWN STAGING AREAS.

SITE PROTECTION

PROTECT ALL LANDSCAPING THAT IS TO REMAIN. ANY DAMAGE OR LOSS RESULTING FROM EXCAVATION. GRADING, OR CONSTRUCTION WORK SHALL BE CORRECTED OR REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OF ALL EXISTING SITE UTILITIES AND SHALL COORDINATE THEIR REMOVAL OR MODIFICATIONS (IF ANY) TO AVOID ANY INTERRUPTION OF SERVICE TO ADJACENT AREAS. THE GENERAL CONTRACTOR SHALL INFORM HIM/HERSELF OF MUNICIPAL REGULATIONS AND CARRY OUT HIS/HER WORK IN COMPLIANCE WITH ALL FEDERAL AND STATE REQUIREMENTS TO REDUCE FIRE HAZARDS AND INJURIES TO THE PUBLIC.

REFERENCES:

- 1. CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)
- 2. AASHTO GREEN BOOK

PLATING AND TEMPORARY SURFACING:

- 1. TRENCHES WILL BE COVERED WITH PLATES WHICH SHALL BE FLUSHED WITH EXISTING PAVEMENT AND SKID RESISTANT.
- 2. THE TEMPORARY SURFACING SHALL BE CLASS 2 AGGREGATE BASE AS SPECIFIED IN SECTION 26 OF THE STANDARD SPECIFICATIONS. THE AGGREGATE BASE SHALL BE EQUAL IN DEPTH TO THE EXISTING PAVEMENT STRUCTURAL SECTION, BUT IN ANY CASE NOT LESS THAN EIGHTEEN (18") INCHES IN DEPTH. THE AGGREGATE BASE SHALL BE BROUGHT WITHIN ONE (1") INCH OF THE TOP OF THE EXISTING PAVING AND COVERED WITH TEMPORARY "COLD MIX" ASPHALT PAVING USING AN MC-250.
- THE SAME DAY AS BACKFILLING AND SHALL BE LEVEL WITH THE EXISTING PAVING. 3. THE CONTRACTOR SHALL MAINTAIN THE TEMPORARY SURFACING LEVEL WITH THE EXISTING PAVED SURFACE AT ALL TIMES. ALL DIRT AND GRAVEL AND DEBRIS OF ANY KIND SHALL BE REMOVED FROM TOWN STREETS BY THE END OF THE DAY. ALL TEMPORARY ASPHALT SHALL COMPLY FULLY WITH THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT'S REGULATION 8, RULE 15.

MC-800 OR APPROVED EQUAL. ALL TEMPORARY SURFACING SHALL BE INSTALLED

- 4. SECTION 302 OF RULE 15 PROHIBITS THE USE OF "CUT BACK" ASPHALT (INCLUDING MC-70) DURING THE MONTHS OF APRIL THROUGH OCTOBER IN PAVING MATERIAL OR IN PAYING AND MAINTENANCE OPERATIONS. THE CONTRACTOR SHALL USE ONLY SLOW-CURE (SC) LIQUID ASPHALTS FOR TEMPORARY TRENCH PAVING DURING APRIL THROUGH OCTOBER.
- 5. IN THE EVENT THE CONTRACTOR DOES NOT COMPLY FULLY WITH THE ABOVE REQUIREMENTS, NO FURTHER EXCAVATION WILL BE PERMITTED UNTIL THE REQUIREMENTS ARE MET.
- 6. ALL WORK SHALL BE DONE TO THE SATISFACTION OF THE CITY ENGINEER.



 \mathbb{F} CE

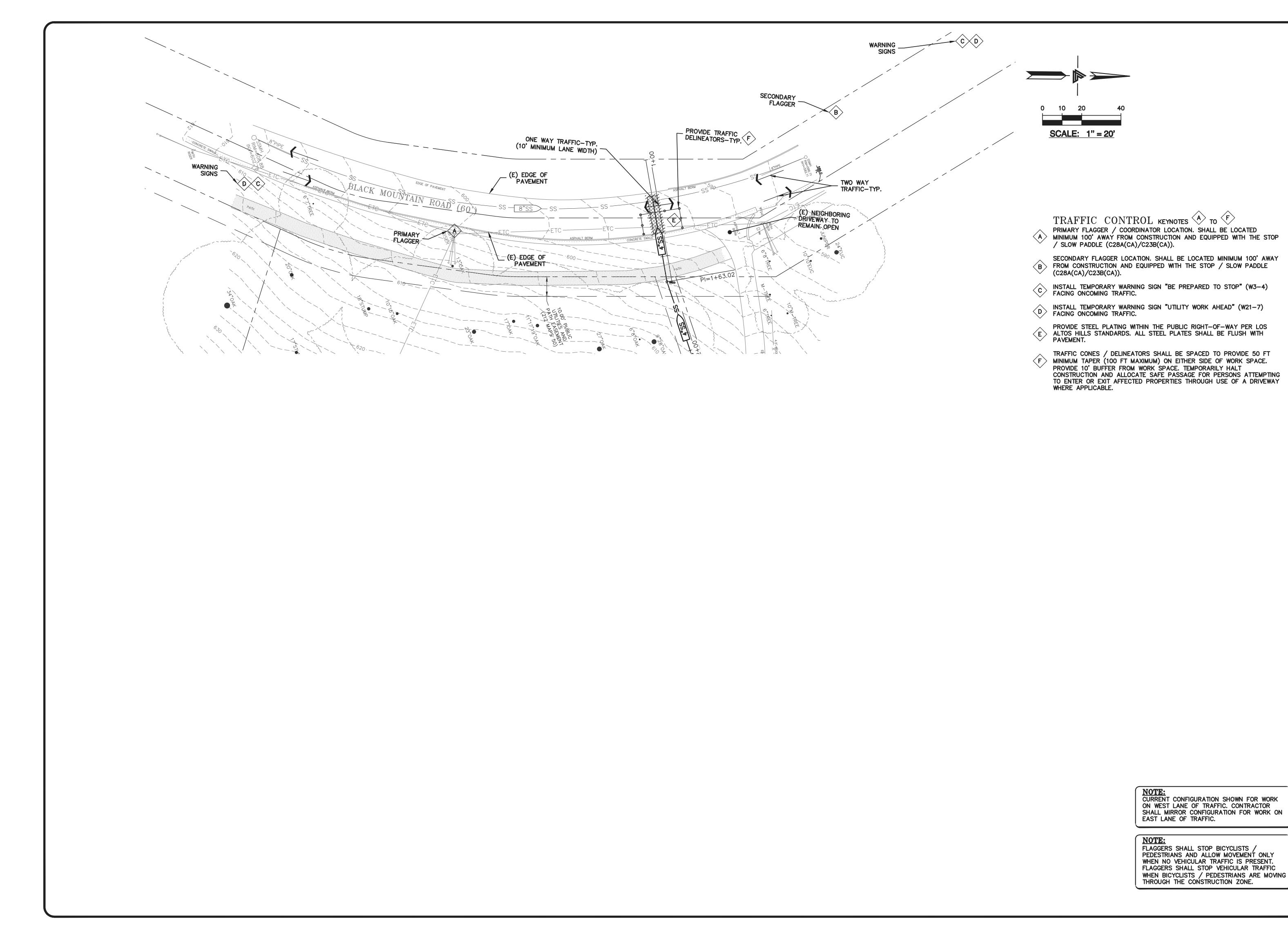
EN HHH ∞ R RESTUNKING 1E(47/10) 77 N

> Z, \blacksquare

REVISIONS JOB NO: 2201397 DATE: 03-12-21 AS NOTED SCALE: DESIGN BY: TT

06 OF 07 SHEETS

DRAWN BY: WA





LAND SURVEYORS

EGIONAL OFFICES:

SEVILLE
JBLIN
AN JOSE

& BRAZE ENGINEERIN

ENGINEERS • LAND SURV

REGIONAL OFFIC

ROSEVILLE

NIA 94545

DUBLIN

MAIN OFFICE:
2495 INDUSTRIAL PKWY WEST
HAYWARD, CALIFORNIA 94545
(510) 887-4086

ARM,
MAIN OFFIGURATIONS
2495 INDUS
HAYWARD,
(510) 887

ZIEGLER RESIDENCE
27474 SUNRISE FARM,
LOS ALTOS HILLS,
CALIFORNIA APN: 182-1

TEMPORARY TRAFFIC CONTROL PLAN

DATE: 03-12SCALE: AS NOT
DESIGN BY: TT
DRAWN BY: WA
SHEET NO:

TCP-2

07 OF 07 SHEETS